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INSIDE DOPE

by GEORGE F. TAUBENECK

Dealers: Please Note

Packaged food, frozen or in paper bags—is safe to eat even if exposed to radiation from an atomic blast, Atomic Energy Commission officials say.

The contamination, if any, is on the outside of the package—like dust particles.

"The contents aren't affected if you open the package carefully," according to AEC experts.

Therefore, it's patriotic to sell home and farm freezers. They will help protect America from Russian atom-bomb blasts.

Gags of the Week

They say that a woman's face is her fortune. And sometimes it runs into a handsome figure.

"Bankruptcy, my boy, is putting your money in your hip pocket and letting the creditors take your coat." —*Journeyman Barber.*

"It's hard to realize these days that this country was founded partly to avoid taxation."—*Kreolite News.*

Belly-Laughs and Common Sense

From *B-B Shots,* wise and witty "house organ" issued by the Byer & Bowman Advertising Agency of Columbus, Ohio:

"THE OFFICE GAGSTER WANTS TO KNOW if you heard about the boy who said his girl was the kind he'd like to bring home to mother—if he could trust his father. OR, the one about the strip-tease dancer who was arrested for no gauze at all. OR, the one about the steno who said to the Boss: 'Thanks very much for the lovely pearls.' And the Boss replied: 'Don't mention it; don't mention it; don't mention it.' OR, the one about the man who judged a beauty contest for the first time and had to feel his way around. OR, the one about the guy who told his girl: 'Honey, it's so dark I can't see my hand in front of me.' And she said 'Don't worry; I know where it is.'

"AT THIS WRITING NO ONE can predict the ultimate effect of the Korean fighting on our economy. But certainly nothing in sight justifies even the most timid advertiser retreating into his shell. Elsewhere in *B-B SHOTS* is a list of the 10 top advertisers in the U.S. It's significant that they are the ones that, in World War II, kept company and brand names constantly before the public. It's more than coincidence, too, that they enjoyed their greatest prosperity since 1945. Advertising isn't a luxury you cut down on to be thrifty or over-buy because money is easy. If you want your advertising in tune with the times, let it go to work for Uncle Sam. Use at least part of it to remind everyone of what must be done on the home front to assure victory.

"SPEAKING OF NUTS & BOLTS, B&B ranks 76th among agencies in placement of business paper space. Finishing 76th in the Kentucky Derby wouldn't classify a nag as a speed demon, but the current National Advertising Register lists 2,716 agencies in the U.S. It's no secret that many big wheels in the agency biz (unlike B & B) have as much respect for trade paper copy as an indicted Communist has for a trial judge. That's because it takes more time and gray matter to put together a bell-ringing technical ad (at about $350 per page) than to whip up a fluffy affair in *THE POST* that nicks the client for $11,200.

"IT WAS TOUGH PICKING THIS gag. First, we thought it would be

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O. A. Sutton Corp. To Make Room Air Conditioner

WICHITA, Kan.—O. A. Sutton Corp. has announced its entry in the room air conditioning field, according to O. A. Sutton, president of the firm.

Preliminary showing of the new unit was made to Sutton's district sales managers. Although plans for national distribution are complete, production and merchandising programs were not revealed. These are to follow at a formal showing of the air conditioner at a national distributor conference to be held here late in November.

No details of the features were

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Court Dismisses 2 Fair Trade Suits Brought By Sunbeam Corp.

PHILADELPHIA—In a reversal of a stand it had taken earlier, the Federal Circuit Court of Appeals in Philadelphia dismissed two fair trade price suits brought by the Sunbeam Corp., Chicago manufacturer of electrical appliances, against S. A. Wentling, operator of a mail order house in Palmyra, Pa., and the Civil Service Employees Cooperative of Philadelphia.

The new stand taken by the appellate court was based on the U. S. Supreme Court's ruling that fair trade minimum price contracts involving products in interstate commerce cannot be made binding on retailers not signing such contracts.

The Sunbeam suits were first

(Concluded on Page 4, Column 5)

A. T. Millott To Head G-E Freezer Sales

BRIDGEPORT, Conn.—The appointment of Arthur T. Millott as sales manager for food freezers has been announced by A. G. Chaffer, marketing manager of the General Electric Co.'s household refrigerator department.

A. T. Millott

Millott, a graduate of Illinois Institute of Technology, came with General Electric's commercial refrigeration department at Cleveland in 1930. He was there until 1935, when he began three

(Concluded on Back Page, Column 5)

NEMA Meets Nov. 12-15 In Atlantic City

ATLANTIC CITY, N. J.—The 25th annual meeting of the National Electrical Manufacturers Association is being held here this week from Nov. 12 to 15, according to W. J. Donald, managing director.

Keynote of the meeting, which will be held at Haddon Hall hotel, will be the stability of business during the nation's defense program. Beginning on Friday, Nov. 9 and continuing throughout the next week will be committee, division, section, and group meetings.

Vice Admiral George F. Hussey, Jr., U. S. N. (retired) and manag-

(Concluded on Page 4, Column 4)

2 NPA Orders Aid Copper, Steel Users

WASHINGTON, D. C.—Aid to copper and steel users was provided by two regulations issued by the National Production Authority recently.

An amendment to Direction 3 to M-1 provided relief to steel users, while Direction 2 to order M-11 aided users of copper.

The steel order provides:

1. Cancellation of the former 10% reserve of output so that producers may accept up to 100% of their monthly capacity in authorized CMP orders.

2. Prompt notification by steel suppliers of rejection or acceptance of orders.

3. Steel producers will open their order books for a quarter not later than 45 days prior to the lead times for various steel products.

The copper order provides:

1. Cancellation of the former 15% reserve of output so that producers may—but are not required to—accept up to 100% of their monthly authorized production in CMP orders.

2. Prompt notification by copper product suppliers of rejection or acceptance of orders.

3. Copper producers will open their order books for a quarter not later than 90 days before the first day of the quarter.

NPA pointed out that until this change in the copper order it was difficult for users to place orders with their regular suppliers, and as a result the industry in general was suffering. It is hoped that the new ruling will help to restore the traditional customer-producer relationship.

The action on steel will permit the placement of more CMP orders for the first quarter of 1952, it was explained. NPA pointed out that the steel situation is still under intensive study to devise new steps to improve steel distribution to authorized users.

OPS, Advisory Committee Study New Regulation for Refrigerators, Freezers

WASHINGTON, D. C.—A proposed dollars and cents "tailored" order for manufacturers, wholesalers, and retailers of household refrigerators and home freezers to use in place of GCPR and CPR 22 was discussed at a meeting here of the Office of Price Stabilization and the industry advisory committee for these two industries.

At this same meeting OPS officials indicated that they were not considering freezing the price of refrigerators and home freezers at current levels.

The committee reported to the agency that the industry was suffering from operating in a "very soft market" and were being further burdened with a "complicated" reporting system, which it is hoped will be improved if the agency does issue a tailored pricing order.

Airtemp Names Knoff; Hollencamp to New Posts

DAYTON—Airtemp Div. of Chrysler Corp. has announced the appointments of J. F. Knoff as general sales manager and T. B. Hollencamp as national service manager.

Knoff, former assistant general sales manager, succeeds C. S. Stackpole who recently resigned.

Hollencamp has been supervisor of service since 1949.

Clarify Excise Tax Picture On Appliances

WASHINGTON, D. C.—In an effort to clarify the tax picture on appliances, Revenue Bureau officials have explained that some electric, gas, and oil appliances previously subjected to a 10% manufacturers' excise tax or added to the tax base in the 1951 Revenue Act, will not be taxed "if by reason of construction or design" these appliances will be used commercially rather than as household units.

The 1951 tax law specified that the 10% excise collected under Section 3406 of the tax code (electric, gas, and oil appliances) would apply only on household-type units, with the exception of electric direct motor-driven fans and air circulators.

On these items tax would be collected on both commercial and household-types.

This interpretation would lift the excise tax levy on some electric, gas, and oil appliances designed for use in restaurants and other commercial establishments. All industrial appliances covered by Section 3406 of the tax code are also tax-exempt.

NPA Plans To Restrict Use of 'DO' Ratings

WASHINGTON, D. C.—Plans to restrict use of "DO" ratings on orders for supplies have been announced by the National Production Authority because manufacturers have used it too much.

NPA officials aren't satisfied with the way their complicated system of priorities is working. It has too many kinks in it and one of them is the wide use of the DO priority rating.

For instance, manufacturers use it to hurry up things that aren't scarce. A desk manufacturer can use it for lumber, providing he puts the desk together with nails. If he puts it together with screws, he can't use the priority. That's just one of the smaller kinks.

Or an auto maker can use it to get a dishwasher for his cafeteria. A repair shop might use it to hurry up an order for a water cooler.

What bothers the NPA is that there are too many rated orders for

(Concluded on Back Page, Column 3)

ASRE Will Meet In New Orleans Dec. 2-5

NEW YORK CITY—The production of low temperatures and their applications, design features of the packaged air conditioner, the use of alternate or substitute materials, and industrial applications of insulation are the subjects to be featured in four informal conferences at the 47th annual convention of the American Society of Refrigerating Engineers, Dec. 2-5, Hotel Roosevelt, New Orleans.

Following a practice adopted a few years ago by the Domestic Refrigerator Engineers, the program committee headed by Leon Buehler, Jr., Chicago, decided to extend this procedure so that additional conferences or symposiums affording informal discussions will be held necessitating concurrent meetings with the regular technical sessions.

These latter will offer a diversity of subjects pertinent to modern engineering practice. Of particular interest will be an account of the research work being done at the University of Michigan on the effect of

(Concluded on Back Page, Column 1)

Crowds Brave Blizzards To Attend Show

8,000 Register In First 2 Days To See Many New Products, Innovations

CHICAGO—Despite the worst November weather conditions within the memory of most Chicagoans, the 7th Refrigeration and Air Conditioning Exposition got off to a fast start on the opening two days, with some 8,000 visitors registering to view a wide variety of new products.

L. C. McKesson, chairman of the All-Industry Show Committee, said that there were good indications that the attendance might approximate the 12,000 visitors hoped for.

Those who braved the blizzardy weather to get to the exhibits at Navy Pier were treated to a host of innovations and improvements in refrigeration and air conditioning equipment.

Among some of the innovations were the following:

New package "heat pump" reverse cycle year-round air conditioning systems, with improved and simplified operating and changeover controls.

Details on the many new and improved products exhibited at the All-Industry Show will be presented in succeeding issues of the NEWS, together with complete reports on the meetings of the various industry associations which were held during the time of the All-Industry Show.

New defrosting controls.

Improved-design frozen food merchandising cabinets, more compact, but with increased display area.

A 1-cu. ft. refrigerator.

A number of front opening farm milk coolers.

Electric dehumidifiers, including self-contained models both larger and smaller than those which have heretofore been produced.

New automatic ice cube and shaved ice makers.

Improved models of room air conditioners, some of which employ an added number of functions.

Many improved, revamped lines of condensing units with a continuing tendency noted to larger units on the part of manufacturers who have heretofore concentrated on smaller units.

Literally hundreds of new controls, valves, and accessory items to improve the functioning of refrigeration and air conditioning systems.

Supermarkets Planning To Expand Facilities

BOSTON—Within the limits of current government restrictions, supermarkets will continue to expand, it was indicated at the Boston Conference on Distribution.

One of the food chains planning to do so is the Grand Union Co., operator of 323 retail outlets in eastern states. Lansing P. Shield, president, said the company intends to open new units to the extent permitted by curbs on building materials supplies. He predicted that supermarkets

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IN THIS ISSUE

Violation of Price Ceilings by Overcharging Can Result In Collection of Treble Damages

CHICAGO—What the penalties are for violating price ceilings and Office of Price Stabilization requirements were outlined recently for businessmen by Edward P. Morgan, assistant director for enforcement in the OPS.

Morgan declared that he was not going to conduct a "tough" enforcement program but that he was going to see that the law is obeyed.

"I want to emphasize the importance of our record-keeping requirements in the general scheme of our price control program," he stated.

"I shall do everything I can to see that businessmen are not unduly burdened with keeping records. But records and information are vital to our program, not only for the purpose of enabling the individual businessman to determine accurately his lawful ceilings, but also to enable OPS to do an effective and fair job of writing and enforcing regulations and detecting violations.

RECORD-KEEPING IMPORTANT

"It will not be enough for a businessman charged with having violated our record-keeping requirements to argue or even prove that his failure to comply with such requirements did not result in any over-ceiling sales.

"We cannot wait until such violations have resulted in over-ceiling sales before securing compliance with such requirements. . . .

"I will urge not only injunctive but criminal proceedings as well in a case of clear and wilful non-compliance with our record-keeping requirements."

On the subject of overcharging consumers he explained the penalty provisions this way:

"The Defense Production Act of 1950, which provides the authority for our economic stabilization program, requires that the overcharged consumer shall receive an amount in damages three times the amount of the overcharge, but not less than some amount between $25 and $50 to be fixed by the court.

"However, if the dealer can prove that the violation was neither wilful nor the result of his own neglect, the overcharged consumer receives compensation for the amount he has been overcharged.

"In any case, the court may also award the consumer's attorney a reasonable fee and court costs to the consumer, all to be paid by the seller.

"If the overcharged purchaser is not one who buys for his own personal use but is a commercial user, this claim belongs not to the purchaser but to the government.

LAW REVISED JULY, 1951

"Until the law was revised on July 31, 1951, such a treble damage claim could not exceed the amount of the overcharge plus $10,000. When the law was revised, however, this $10,000 limitation was removed.

"Now, therefore, in every case of overcharge, recovery of up to three times the amount of the overcharge may be had, in the discretion of the court, except in cases where the seller can prove that the violation was neither wilful nor the result of his own neglect.

"In such case he is, nevertheless, still liable for the full amount of the overcharge. To illustrate, under the old law an individual who overcharged, let us say, to the extent of $50,000 could not be held liable for more than $60,000.

"But if he wilfully overcharged to the extent of $50,000 today, he would be liable for the full amount of $150,000. This should prove a real deterrent.

"Under the law of July 31, if a seller overcharges he must report his profit for income tax purposes, but he may not include as expenses any fines or judgments he must pay for having overcharged.

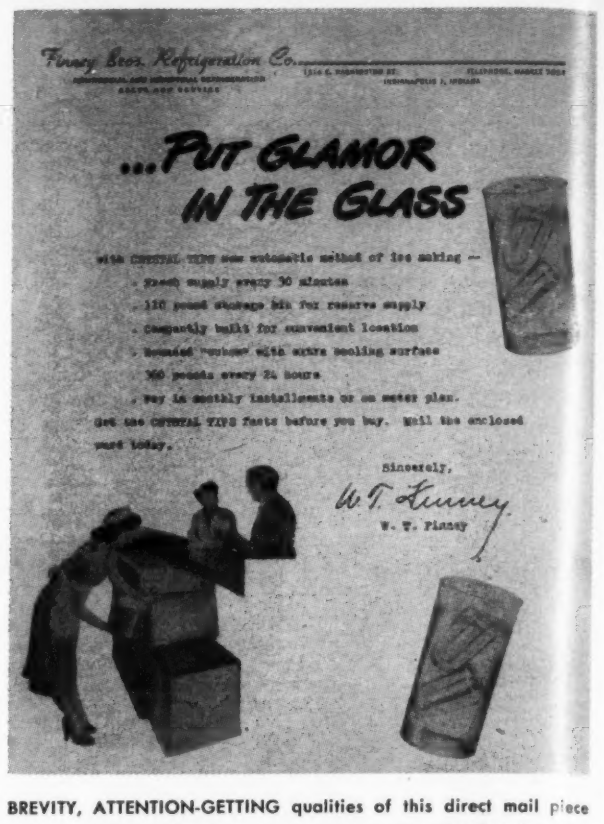
BUYER AND SELLER LIABLE

"It should not be overlooked that in every over-ceiling transaction, not only is the seller liable, but if the buyer is a commercial user, he is also liable and subject to a fine where he either knew or had substantial reason to believe that he was being overcharged.

"In addition, under the revised law of July 31, such a buyer might also be prevented from claiming amounts paid over-ceiling as business expenses on his income tax return. Under the previous law, this provision applied only to employers who exceeded wage ceilings.

"The law also provides us with an injunction provision against actual or threatened violations. We shall use it whenever and wherever we need it."

DIRECT MAIL pieces like this are used by Finney Bros. Refrigeration Co. in Indianapolis to get the reader's attention and be sure that they are not consigned to the wastebasket unread.



BREVITY, ATTENTION-GETTING qualities of this direct mail piece make it more desirable than the longer more detailed literature manufacturers furnish, W. T. Finney, owner of the store feels.

How To Beat 'Price Competition'

1. Concentrate Sales Effort on a Few Specialty Products
2. Back These Items with Consistent Direct Mail Campaign
3. Pay 'Bird Dogs' To Hunt Up Valuable Prospects

By John O. Sweet and George M. Hanning

INDIANAPOLIS—A dealer here says he has found the answer to "price competition" in the commercial refrigeration field.

For W. T. Finney, owner of Finney Bros. Refrigeration Co., the answer is concentration on some specialty items, backed by consistent, attention-getting direct mail and the use of "bird dogs."

At one time, Finney was right in there struggling to compete with the "big fellows." He handled the same variety of fixtures everybody else did and maintained his own sales and service departments.

But, although he made his share of the sales, Finney found that overhead and the necessity of meeting "price competition" were eating up his profits. So, discovering that selling specialty refrigeration was much more profitable, he discarded his conventional lines and became what is practically a one-man operation.

MAINTAINS NO SERVICE DEPARTMENT

A serviceman formerly employed by Finney set up his own shop and now handles installation and service for the dealer on a contract basis.

"That man now does three times as much work for me as he used to for the same amount of money," Finney declared. "Then I had to provide the service truck and tools in addition to paying his salary."

Finney concentrates on only a few pieces of equipment which, in his opinion, have at least one distinctive advantage not offered by competition. These include a compact automatic ice machine which produces rounded "tips," a sandwich case for taverns, and an extra-large-capacity beverage cooler.

Actually, the dealer can provide a variety of commercial and industrial refrigeration products for customers, But his main effort goes into the few items noted.

SELLS ADVANTAGES INSTEAD OF PRICE

Finney's reason for selecting equipment which he considers to have an outstanding advantage is to this effect: "The competing salesman who follows me into a prospect's place of business may be a better salesman than I am or sell for less money. But the equipment he sells won't have the same advantages as mine and therefore there isn't a chance to cut my price."

Currently, Finney's prospects include hotels, taverns, restaurants, hospitals, and institutions.

What seems to be a rather odd ruling by the Indiana alcoholic beverages commission has provided a lucrative market for sandwich counters. This ruling requires that all bars must handle enough food to be rated as restaurants.

Use of a sandwich case enables a tavern owner to meet the requirements of the ruling. And such a case is particularly attractive to them since they can install it conveniently at the end of the bar.

(Although the ruling appears somewhat peculiar, Finney explained that it has improved the class of tavern owners.)

Finney has built an interesting window display around his large-capacity beverage cooler. Features of the cooler are written on cards taped to the store window. Ribbons run from the cards to the feature described. Object of the display is to give passers-by a quick resume of the cooler's advantages.

This is the same objective behind Finney's direct mail advertising. He believes that an effective direct mail piece must be brief, catchy, and easy to read—or else it will go into the wastebasket unread.

DOESN'T USE MANUFACTURERS' LITERATURE

Finney doesn't use manufacturers' literature for prospecting because he feels it contains too much for the prospect to read. Such literature, he thinks, is excellent material to give customers after they buy because it provides them with the helpful detailed product information they want.

So thinking, Finney prepares his own direct mail pieces, which go out on regular company stationery. Here's how he does it:

"I'm strictly a plagiarist. I read all the magazines, literature, and promotion that comes in over my desk. I clip anything that appeals to me and set it aside for future use.

"What I want is something that a fellow will spend two or three minutes reading. But first you've got to use something that will catch his eye at once.

"I try to make each letter different than the previous one. So I'm always looking for gimmicks that'll intrigue a man's curiosity enough to get him to read my message."

MAILING PIECE DESCRIBED

A recent mailing piece promoting the ice cuber Finney handles illustrates his ideas. He used only 63 words plus three pictures to tell his story.

At the top and bottom of the letter, at the right-hand side, were pictures of water glasses containing "Crystal Tips" cubes. At the bottom

(Concluded on next page)

Commercial Dealer Finds Catchiness, Brevity Vital In Direct Mail Piece

(Concluded from preceding page)

left was an outline photo of a barmaid taking cubes from the cuber bin as two customers chat at the bar.

The black headline read. " . . . Put Glamor in the Glass," and copy continued, "with CRYSTAL TIPS new automatic method of ice making.

"Fresh supply every 30 minutes

"110 pound storage bin for reserve supply

"Compactly built for convenient location

"Rounded 'cubes' with extra cooling surface

"360 pounds every 24 hours

"Pay in monthly instalments or on meter plan.

"Get the CRYSTAL TIPS facts before you buy. Mail the enclosed card today."

As are all direct mail pieces, the message was signed by Finney.

This piece also illustrates another principle. Finney always encloses a return post card with each letter.

When following up on returned cards asking for more information about a product, Finney usually tries to find out what particular feature or features in the mailing piece prompted the prospect to return the card. The answers he gets guides him in preparing later mailing pieces.

With the ice cuber letter, one man said he was attracted by the rounded cubes in the glasses. The line on the meter-plan offer interested another prospect.

Although his direct mail letters have been successful, Finney pointed out that he has not yet discovered any one "magic" formula to assure large readership. So he is constantly on the look-out for new sales-producing ideas.

An especially eye-catching letter was one headed "Check Your 'Blind Spot' Right Now." Beneath the heading was a black rectangle with a small white cross at the left side and a somewhat larger white circle at the right. The copy went on:

"Close left eye and look fixedly at CROSS with right, holding page about 10 in. from face. By moving it nearer or farther, a distance can be found at which the CIRCLE disappears, its image falling on the Blind Spot."

This gimmick led the reader into selling copy which began: "Now check the 'BLIND SPOT' in your business!! Today few of your customers will complain about imperfections in quality or temperature of the draft beer you may serve them—they simply try somebody else's beer! Here's where the blind spot comes in. . . ."

Although Finney prepares the rough drafts of the letters, the final product and its mailing are turned over to a printing and mailing firm. He sends the firm the copy and pictures for each letter and supplies the list of prospects to whom it is to be sent. The printing concern carries on from there.

MAILING PIECES COST $100 FOR 1,300

"This service costs me $100 for 1,300 mailing pieces, but it is well worth while. Out of the 1,300 Crystal Tips letters, for instance, I received eight returns. Of these, I should make four sales. Just one sale, however, would more than pay for the mailing."

Finney gets the names of most of his prospects from beer and liquor licensing lists. "Few people could use our size beverage cooler if they didn't sell alcoholic beverages," he explained. Hotels, restaurants, and institutions have also been circularized.

The direct mail now goes mainly to prospects located near but not in Indianapolis. Finney has found from experience that most of the returned cards come from out of town. City businessmen tended to set the card aside with the intention of dropping into the store—but usually forgot to do so. Thus, mailings to the latter were mostly a waste of time and money.

Finney goes after city prospects through personal contact and the use of 15 to 20 "bird dogs." The latter include salesmen of various types who do business with Finney's prospects, such as beer and paper cup salesmen.

The dealer pays each bird dog $25 for each prospect sold. If two tipsters turn in the same name, both are paid the $25 fee. Finney pointed out that in such a case, it is worth the extra $25 to keep the goodwill of both and their faith in the integrity of Finney Bros. If the bird dog brings in the customer already to sign an order, Finneys pays the full 10% commission.

FINNEY DOES OWN LOCAL SELLING

Finney does all of the local selling himself, covering the area within a 50-mile radius of Indianapolis. A salesman in Muncie works the territory around that city.

As a result, Finney is out of the store a good deal of the time. For this reason, he employs a phone-answering firm to take telephone calls during his absence. It's partly for the same reason that he employs the printing firm to finish off and send out his direct mail—an arrangement he finds most satisfactory.

TRRF Sets Meeting for New Orleans, May 2-4

NEW ORLEANS—Annual meeting of the Refrigeration Research Foundation to be held at the Roosevelt hotel here May 2 to 4, 1952, will begin with open technical sessions of the Scientific Advisory Council, announces Herbert Farnsworth, president, and H. C. Diehl, secretary and director.

As they did in Boston this year, TRRF and the National Association of Refrigerated Warehouses will merge their programs of general industry interest.

The open technical discussions will continue on the second day of the meeting, and on Sunday, May 4, there'll be the annual TRRF membership meeting followed by the board of governors meeting and the AWA "Sazerac" party. A breakfast meeting of the executive committee will be held the morning of May 5.

Gas Appliance Sales Lag During First Nine Months

NEW YORK CITY—Manufacturers' shipments of domestic gas ranges, gas water heaters, and gas fired central heating equipment for the first nine months of the year were considerably below those of the same period last year, the Gas Appliance Manufacturers Association announced recently.

Range shipments dropped from 2,210,000 units to 1,786,400. Water heater shipments fell from 1,719,500 to 1,522,400. Heating equipment slipped from 794,900 units to 444,500 units.

NPA Discusses Early 1952 Metals Outlook for Small Appliance Makers

WASHINGTON, D. C.—Availability of straight chromium stainless steel strip in the first quarter of 1952 at the same rate as during the current fourth quarter was forecast by the National Production Authority at a recent meeting with the Electric Housewares Industry Advisory Committee.

Uncertainty, however, as to second-quarter military and Atomic Energy Commission drains upon additional chromium production expected by spring, 1952, prevents any indication of small electric housewares allotments beyond the first quarter, NPA said.

Manufacturers of electric housewares such as toasters, coffeemakers, food and beverage mixers, and irons, have generally turned to straight chromium stainless steel as a substitute for the scarcer nickel-bearing stainless steel.

NPA advised the committee that:

Nickel chrome resistance wire used in heating elements is expected to continue in tight supply during the rearmament effort. NPA is conscious of the indispensability of this wire to the electric housewares industry, officials assured committee members.

Copper prospects continue to be tight. No early relief is to be expected, NPA said.

Plastics of the thermo-setting types (compression molded) used in electric housewares are mostly in good supply. Phenol-formaldehyde and urea plastics are available and the supply of melamine plastics, now fair, is rapidly improving.

Aluminum, both primary and secondary, is expected to continue short.

Manufacturers asked that a longer lead time be given in changing controls affecting their industry. They said reductions in allotments of controlled materials throw their inventories of non-controlled materials out of balance and unduly tie up money and space.

First-quarter 1952 allotments will be based on information now being received on material usage during the base period, including hardship adjustments, in contrast with the fourth-quarter allotments which were made on dollar value of shipments.

OPS Sets Wholesale Ceilings For Finders' Holliwood Line

WASHINGTON, D. C.—Retail and wholesale price ceilings for the Holliwood line of electrical housewares manufactured by the Finders Mfg. Co. of Chicago were announced recently by the Office of Price Stabilization.

They are as follows:

Appliance	Retail	Wholesale 2 or less	Wholesale 3 or more
Deepfry 700	$26.95	$17.52	$16.17
Waffler 820L	5.00	3.25	3.00
Waffler DW46	22.95	14.92	13.77
Boiler Oven 90	32.50	21.13	19.50
Broiler 60	24.95	16.22	14.97
Broiler 40VL	24.95	16.22	14.97
Broiler 40V	29.95	19.47	17.97
Grill Tray 75	4.95	3.22	2.97

NLRB Supports Shutdown Action by Employers' Association In Des Moines Auto Dealer Case

WASHINGTON, D. C.—The National Labor Relations Board recently ruled unanimously that a shutdown of operations by members of an employers' association did not violate the Labor Management Relations Act when such action (1) was taken because of the economic uncertainty caused by a union's threat to strike without notice, and (2) was not in reprisal against the strike action.

The ruling was made in an unfair labor practice case filed by Local 254, International Association of Machinists (A.F.L.), against 19 new car dealers in Des Moines, Iowa. The 19 employers were among 21 dealers negotiating with the union through the Des Moines Automobile Dealers Association.

The board adopted the Trial Examiner's finding that the union had pursued a strategy of holding a strike threat over the 19 dealers whose shops were not struck. In some shops, union members told their employers that no notice of strike action would be given.

On this point the Trial Examiner said:

"Under the circumstances, the only conclusion that can be drawn is that the union's strategy . . . was to keep the respondents (the 19 dealers) off balance with the threat of momentary strike hanging over their heads at all times. . . .

"Concededly there was nothing unlawful in the union's strategy, and it was entitled to pursue it; but having apparently set out to produce an uncertain operating situation it cannot complain now because it succeeded, or be heard to say that it should not have been taken seriously."

His final conclusion, also adopted by the board, was that it was "not proved that the shutdown was motivated by other than economic considerations."

Reviewing earlier board decisions on the legality of lockouts and layoffs of employes in the face of proposed strike action, Trial Examiner Charles W. Schneider summarized the general rule as follows:

"An employer is not prohibited from taking reasonable measures, including closing down his plant, where such measures are, under the circumstances, necessary for the avoidance of economic loss or business disruption attendant upon a strike.

"This right may, under some circumstances, embrace the curtailment of operations before the precise moment the strike has occurred. The pedestrian need not wait to be struck before leaping for the curb."

Army Engineers Establish Atlantic District Office

WASHINGTON, D. C.—A new engineer district to be known as the Atlantic District has been established by the Army Engineers, it was announced here. Temporary headquarters are at 80 Lafayette St., New York City.

Patterson Sees Great Sales Potential In Frozen Food Cabinets

CHICAGO—Frozen food merchandisers represent the greatest sales potential and the biggest challenge in the commercial refrigeration equipment industry today, according to H. C. Patterson, Kelvinator commercial sales manager.

Addressing a 1952 "kickoff" meeting of Kelvinator commercial sales managers on the eve of the Seventh Annual All-Industry Show at Chicago's Navy Pier, Patterson said the vast increase over the past 10 years in the number of retail outlets carrying frozen foods offered the industry a "golden opportunity."

"In 1941, only 29% of the grocery stores in the U. S. carried frozen food," Patterson said. "Today, 88.3% carry frozen foods.

"Without a doubt the frozen food business in the next two or three years can be developed to where it will exceed our total commercial volume."

Patterson said Kelvinator commercial sales volume in 1951, including frozen food merchandisers, showed an increase of more than 15% over 1950.

He urged "contact and repeated contact" with frozen food packers, distributors, large cooperative and voluntary buying chains, chain food stores, commercial dealers, and fixture houses, as the best sources of new business.

Patterson said Kelvinator's new line of equipment gave the company an "important competitive edge."

The 1952 equipment, displayed at the All-Industry Show, includes a full line of frozen food merchandisers from six to 12 cu. ft. in size, water coolers, and condensing units, including 16 sealed and 15 air and water-cooled open-type. Newest condensing units are four new "F-22" hermetically-sealed models, offering low-starting torque and high-starting torque systems in both ¼ and ⅓-hp. sizes.

NEMA Convention--

(Concluded from Page 1, Column 2)

ing director of American Standards Association, Inc., will address the general association luncheon at 12:30 p.m. Tuesday, Nov. 13. His topic will be "NEMA and the ASA—What They Mean to Each Other."

Following is a chronological program of those meetings the representatives will attend:

TUESDAY, NOVEMBER 13

1. General luncheon, 12:30 p.m.

Speaker: Vice Admiral George F. Hussey, Jr., U.S.N. (retired), managing director, American Standards Association, Inc.

Topic: "NEMA and the ASA—What They Mean to Each Other."

2. Annual dinner and entertainment, 6:30 p.m.

Outstanding professional entertainment, featuring—

a. Borrah Minnevitch's Rascals—Top comedy harmonica act.

b. Liberace—Great piano virtuoso and humorist, recently starred at Waldorf-Astoria hotel, N. Y., and Chez Paree, Chicago.

c. Irwin Corey—Outstanding comedian recently starred in the Broadway musical "Flahooley."

WEDNESDAY, NOVEMBER 14

3. Annual luncheon, 12.30 p.m.

a. Awarding of fifty-year certificates.

b. Presentation to past presidents.

4. Annual meeting.

The meeting, to follow luncheon.

a. Will act on the Program of Projects and Budget for 1952;

b. Will receive the Nominating Committee's report on the election of members to the board of governors; and

c. Will elect governors.

Fair Trade--

(Concluded from Page 1, Column 2)

heard in the Federal District Court, which enjoined the concerns from cutting prices below those set in fair trade contracts. In the Wentling case, the Circuit Court upheld the lower court's decision with respect to sales made within the state but held that the Pennsylvania fair trade law did not cover sales made to customers in other states.

The U. S. Supreme Court, in a case involving a New Orleans supermarket, subsequently ruled that fair trade contracts could not be enforced on non-signers as far as products in interstate commerce are concerned.

The Circuit Court in Philadelphia, in reversing its original finding in the Wentling case, stated:

"It is now clear, in view of the Supreme Court decision, that even when we cut down the protection Sunbeam wanted we still gave it more than it should have had.

"The Supreme Court's conclusion is perfectly clear. One who does not sign a price maintaining contract cannot be subjected to the non-signer provision of a state fair trade law where interstate commerce is involved. So it would seem that Sunbeam is entitled to no protection at all against Wentling, a non-signer."

A similar decree was handed down by the appellate court in Sunbeam's action against the Philadelphia cooperative.

AFTC Meeting Discusses Schwegmann Decision

GARY, Ind.—Fair-Trading manufacturers in diversified industries across the nation assembled in New York for the Twelfth Annual Meeting of American Fair Trade Council held at the Waldorf-Astoria recently.

According to John W. Anderson, president of the council, the Fair-Traders discussed problems which have arisen since the Supreme Court handed down the Schwegmann decision, and planned their cooperation in AFTC's "Operation Restoration."

James M. Mead, Federal Trade Commission chairman, addressed the meeting on the subject, "Only an Amendment to the Miller-Tydings Act Will Restore Fair Trade."

Herbert A. Bergson, former Assistant Attorney General of the United States in charge of the Anti-Trust Div. of the Department of Justice, discussed "Intrastate, versus Interstate, Fair Trade—Since the Schwegmann Decision."

Discussing the proposed educational activities of "Operation Restoration," Anderson asserted that "all activities of Fair-Trading segments of industry must be related toward the common objective of an amendment to the Miller-Tydings Act—adequate to restore that Act to its full and intended potency for public service."

Revere Promotes Russell, Kennedy

NEW YORK CITY—James J. Russell has been elected chairman of and chief executive officer of Revere Copper & Brass, Inc., and James M. Kennedy has been elected president, according to a recent announcement.

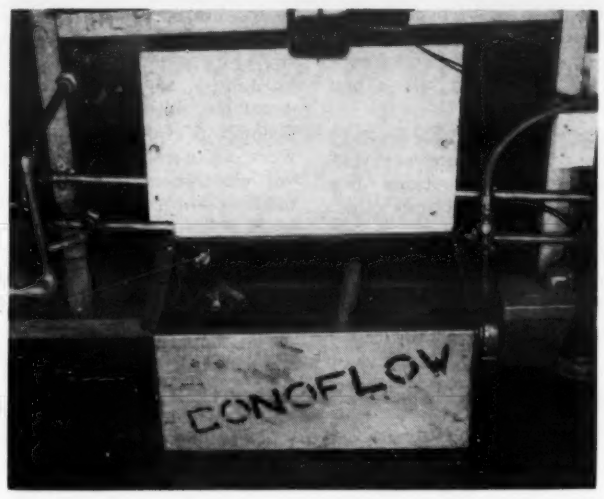
Russell, who has served as president of Revere since 1947, succeeds C. Donald Dallas who has retired as board chairman.

He began his business career with Revere and its predecessor company and has been connected with all phases of the company's operation.

Kennedy joined Dallas Brass & Copper Co. in 1925, and after its merger with Revere he became its treasurer.

In 1934 he conceived the idea for copper-clad stainless steel.

Remington model 10-W room air conditioner installed in office of Mark Watkins of Conoflow Corp.



Drain system for the room air conditioner which solved the problem of having no floor drain.

How To Remove Condensate from Room Conditioner Where No Floor Drain Exists and Drain Is Higher Than Drip Pan

PHILADELPHIA — An unusual method of removing condensate from a room air conditioner where no floor drain exists and the only available drain is considerably higher than the drip pan of the unit was developed by Mark Watkins, vice president and treasurer of Conoflow Corp. here.

Watkins has a 1-hp. Remington water-cooled console model air conditioner installed in his office for year-round conditioning. His is an inside office in rented quarters where floor drain construction was both impractical and impossible.

Watkins solved his problems by running a hose from the drip pan of the unit to a sump box located on the other side of the wall. The unit was raised 5 in. above floor level when installed.

Water drained from the drip pan into the sump box. When it reaches a depth of ¾ in., a tilting mercury switch attached to a float activates a centrifugal pump installed on one end of the sump box.

The pump is capable of raising the condensate to a head of 11 ft. A check valve was installed above the pump to prevent the condensate from flowing back into the pan when the pump is not in operation. Watkins claims that the system would not operate without the check valve.

He also stated that had he known all that he does now he would have piped the check valve into the condenser outlet pipe, thereby saving the running of a separate line for the condensate return.

He claims, however, that the present system works "ideally and requires absolutely no attention."

Watkins is a strong advocate of year-round air conditioning for private offices, so he had the unit equipped with strip heaters and thermostat. When the wall switch is turned on, the automatic control takes over giving cooling, filtering, circulation, and dehumidification on hot summer days and constant room temperature during the fall and early spring when heat may be desirable in the morning and cooling in the afternoon.

Alongside the switch, a red light indicates that the unit is in operation. Should Watkins leave the office early and not return, this light calls the attention of those remaining to the fact that the unit needs to be shut off before the office closes.

Bush Names 3 to Posts As Field Sales Engineers

HARTFORD, Conn.—Bush Mfg. Co. announces the appointment of E. R. Ramsey, sales engineer, Washington, D. C., to the western New York territory with headquarters in Rochester.

Also announced is the appointment of D. L. Adkins, formerly consulting engineer, as sales engineer with headquarters in Washington, D. C. Adkins will cover District of Columbia, Maryland, and Virginia.

A. A. Lincoln of Detroit, was named sales engineer for the Michigan and upper Ohio territory with headquarters in Detroit. Lincoln was formerly connected with the Johnston Refrigeration Co. of Detroit in an engineering capacity and also the General Electric Co., in Bloomfield, N. J.

Apex Starts Shipments on 'Specialized' Defense Items

CLEVELAND—After about eight months of tooling and providing facilities for the manufacture of "highly specialized articles" for the defense effort, Apex Electrical Mfg. Co. is "arriving at the first step in production," according to C. G. Frantz, president.

"October will see substantial shipments," he said, "with increases monthly thereafter to total about 50% of our factory output by early January, unless delays are incurred beyond our control."

Hussmann Appoints 2 Vice Presidents

ST. LOUIS—Appointment of two new vice presidents of the Hussmann Refrigerator Co. here has been announced by W. B. McMillan, president.

They are D. E. Rutishauser, who will have charge of the newly organized aircraft division of the company, and Glennon J. Doyle.

Rutishauser has been chief engineer of the company since 1944 and has been with the firm continuously since 1941. Prior to that time he had served with the organization from 1929 to 1931. In 1948, he was sent to England to set up engineering techniques and methods for manufacturing Hussmann equipment in that country.

Doyle has been production manager of the company since 1944 when he joined the firm. Prior to that time, during the war years, he held a number of responsible posts in the war department. From 1931 to 1942, he was manager of sales and manufacturing for the C. Nelson Mfg. Co., ice cream cabinet manufacturer.

Buffalo Forge Nets $498,777

BUFFALO — The Buffalo Forge Co. and subsidiaries reported net profit for the quarter ended Aug. 31 of $498,777.

This compared with net profit of $456,302 for the second quarter and $290,928 for the quarter ended Aug. 31, 1950.

Pre-Packaged Meat Refrigeration Costs Can Be Cut 25% by Proper Stacking In Case

DEL CITY, Okla.—Approximately 25% of the cost of refrigerating self-service, pre-packaged meats can be saved through careful spacing and stacking of packages, it has been found by Victor Jones, head of the Jones Boys Supermarket in this Oklahoma City suburb.

The supermarket operates a 60-ft. long self-service meat department composed of four cases in a continuous line.

With as many as five butchers and five pre-packaging girls on the job in advance of the week-end rush period, it is a temptation to "pile up" meat many packages deep and thus free the employes from the necessity of weaving through customers to restock the cases later on.

However, this piling up of pre-packaged meats into pyramids and blocks places a severe strain on the refrigerated cases, Jones has found. Often, when packages are stacked six or eight high, in tightly packed blocks, the compressor must work overtime to provide sufficient refrigeration for the whole stack.

If, on the other hand, pre-packaged meats are neatly laid out, with plenty of space between, and not too deep, the refrigeration cost is cut 25% or more.

The employe responsible for filling the cases has orders never to stack packages more than two or three deep. Packages are spaced a minimum of an inch apart, even when "mass displays" are used. Larger amounts of space per individual package are allotted to roasts, poultry, and extremely large cuts of meat.

By scheduling the output of pre-packaged meats more closely, it is never necessary to have a large amount of meat on hand. Better efficiency and less cost is the result.

Carrier To Install Large Centrifugal Ammonia Compressor for Monsanto

SYRACUSE, N. Y.—What is said to be the first large centrifugal ammonia compressor ever installed in this country will be used for process refrigeration at the Monsanto Chemical Co. plant, Nitro, W. Va., it was announced by Carrier Corp.

Carrier officials said a five-stage centrifugal compressor driven by a 600-hp. motor has been scheduled for installation in the Monsanto plant to double the capacity of an existing reciprocating ammonia system.

The new unit will serve as the low-stage compressor in the Monsanto refrigeration plant, taking the ammonia gas at 25-lbs. suction pressure and discharging it to the high stage at 75 lbs. Addition of the centrifugal unit will increase system capacity from 400 to 800 tons.

The compressor will be of all ferrous construction for use with ammonia, and will be similar to those used for some years for air and gas compression in the petroleum and chemical processing industries.

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

about the girl who climbed the ladder of success wrong by wrong. Then we switched to the babe who complained all her boy friends were like dry cleaners—they worked fast and left no ring.

"You must have heard about the college boy who named his car Mayflower because so many little Puritans came across in it. And surely you know about the guy in the restaurant who told the Scotch waitress: 'I like the way you roll your R's.' 'Thanks,' she replied 'I guess it's these low-heel shoes they make me wear.' Then there's the furniture-store clerk who told the newlyweds: 'This is a $60 bed, but I'll cut the price to $40 if you act on it now.'"

News from Australia

Ten "air-beef centers," established by Australian National Airways to meet a century-old problem of Australian cattlemen, soon will be in operation. They comprise one of the most ambitious applications of air transport to be found anywhere.

Before "Operation Air-Beef" was launched, cattlemen had to drive livestock over stony mountains to coastal ports. Often the animals went lame and arrived in poor condition. On the way they lost an average of 100 pounds.

Currently they are slaughtered locally, frozen for 22 hours, and then flown to seaports for shipment or directly to local markets.

News from Washington

Nearly a million more women were employed last December than in December, 1949; nearly 50% of all women aged 18 to 24 now work; nearly 40% of women 35 to 54 work; over 35% of women 25 to 34 work (smallest per cent because these have more small children to care for.)

Quotes of the Week

"Each individual ought to be permitted to have three faults. If we would be that tolerant, everything would be all right."

—*Le Digeste Francais.*

"But no one's eyes are open to his fate. A man may step from his house intending no more than to buy shaving soap at the corner drugstore, and return with his entire life changed, or perhaps never return at all."

—ELIZABETH COATSWORTH in *"The Enchanted."*

Wisdom of the Week

If men are smart enough to find a method of preventing war, international as well as national control of atomic energy may become unnecessary, Harry A. Winne, General Electric vice president in charge of engineering policy, declares.

Mr. Winne is a member of the Baruch committee which formulated the original American plan for atomic energy control. He predicts that "at some time in the future governments will discontinue their major operations in this field and permit private industry to forge ahead."

However, he adds, "I cannot forecast whether or not our government will wish to take advantage of this opportunity."

Under present conditions, with practically all the country's production of atomic fuel going into bombs, and with emphasis on secrecy, it is obvious that government will retain control of atomic reactors.

"Even so," Mr. Winne observes, "utility companies should have access to electricity generated in the process—or steam and heat in some other form."

There should be a limit, Mr. Winne believes, to the useful size of a bomb stockpile. If and when atomic bombs become as common and as widely spread as TNT and other munitions, little chance for effective international control will be possible.

Although work for the Atomic Energy Commission by General Electric eventually will lead to practicable atomic power. it will be a long time —20 years or more perhaps—before atomic energy can have any appreciable effect on our electric power industry. However, experimental power-producing reactors probably will be operating within three to five years.

Mr. Winne warns that mere expenditure of large sums of money cannot greatly reduce the time cycle for economic development of an atomic power industry. The latter can be compared with the gas turbine. Proposed many years ago, it has been neglected until recently. An important source of power for aircraft, locomotives and other applications, gas turbine generation at last is coming into its own. Even if billions of dollars had been expended in gas turbine development previously, commercial applications wouldn't have been feasible before this moment in history.

While useful atomic power is under development, radioactive materials produced in atomic reactors are used to cure disease, aid biologists to study living processes, and give metallurgists a new insight into the behavior of metals. Mr. Winne describes how scientists hope, by such methods, to find out more about the exact way in which metals slowly change form under high temperatures, and perhaps to develop new alloys.

Design for Corporate Living

Relatively few American industrial giants have integrated themselves into their communities so successfully as have Louis Ruthenburg and Servel with relation to Evansville, Indiana.

An appreciation banquet, sponsored by the Evansville Chamber of Commerce in honor of Servel's 25th Anniversary, produced the following heartfelt sentiments:

"Our American communities rise or fall with their industries," declared the President of Evansville's Chamber of Commerce. "All of the people on the payrolls of the industries in Evansville share in the success (or failure, if you please) of the companies they work for. We all realize, of course, that these industrial payrolls largely represent the foundation on which other businesses in our community are built—whether they be a wholesale, retail, or service establishment—and whether they be on Main Street or in our suburbs. Basically, they also represent the opportunity for those of our citizens who are in professional work. It seems that a good part of our individual prosperity is a reflection of their prosperity. It follows, too, that the economics of our community life in Evansville—and in every other community—necessarily bind us together in a common goal—a goal of progress toward better living for all of us."

In 1950, Servel's employes received eighteen and a quarter million dollars in wages and salaries. Most of these dollars, of course, went right to work creating more prosperity in Evansville—in shops, in savings banks, support of churches and charitable organizations, and all other community enterprises.

In 1950, Servel bought six million dollars worth of goods and services from Evansville's firms—items big and little, from crates to paper clips. And thereby they put another six million dollars to work creating prosperity. And, in 1950, Servel paid taxes in Vanderburgh county amounting to over a quarter of a million dollars.

Community Service Far Beyond Call of Duty

"No group of men in America have demonstrated their day-in and day-out concern for the community good more realistically than have the executives of Servel," continued Mr. Heseman. "They've contributed generously and unceasingly of their time and energy. They've played an active, personal part in every worth-while Evansville project—Community Chest drives, Red Cross, betterment of our educational opportunities, improvement of hospital facilities, etc.

"Men like Louis Ruthenburg, and George and Paul Jones are rare.

"Over the past 25 years Servel has contributed more than $300,000 to institutions and causes for Evansville's improvement. This is exclusive of the company's recent pledge of $50,000 toward the new St. Mary's hospital. And it's exclusive of contributions made by Servel employes in response to plant solicitations of all kinds.

"A good industrial citizen sees that the community is frankly and continuously informed of company news of interest and concern to all the people. It has been Servel's practice to take the initiative in furnishing newspapers and radio stations with the facts about their operations. And, they furnish this voluntarily and readily—whether it be unfavorable or favorable. On occasion, they have also used paid advertising space to tell the people of Evansville about important company matters which they feel might be of interest to the whole community.

"Recently, Servel received war contracts to make airplane wings for the F-84 Thunderjets—and to make steel cartridge cases for a recoilless rifle. This was news of interest and importance to everybody in the community, and the company immediately released all of the known facts so they would be known by all."

In response, Louis Ruthenburg, chairman of the board, Servel, Inc., stated:

"The development of American industry under our unique pattern of competitive enterprise supplies one of the most important and amazing chapters in world history. This chapter is characterized by exciting and inspiring events, by romance and adventure. The greatest works of fiction pale by comparison.

"The history and growth of Servel are typical of the history and growth of thousands of American enterprises. A man inspired by a dream and motivated by powerful incentives always is found in the beginning. Such a man was Colonel William H. McCurdy. His courage and energy and resourcefulness made his dream come true. Evansville businessmen, joined in an association that preceded the present Evansville Chamber of Commerce, supplied him with certain incentives to establish the Hercules Buggy Company in Evansville. That happened in 1902.

"Starting in one small building with a tiny force of workmen, the business grew and prospered. Hercules made good buggies. They met competition successfully. They were resourceful in merchandising. Part of the output was sold by Sears, Roebuck.

"Colonel McCurdy persuaded Sears to establish their first retail store. Of course, it was located in Evansville. Now Sears have 665 retail stores in all parts of the United States. Before the retail store was opened in Evansville, all of Sears' sales were mail order sales. Last year 70% of Sears' sales, which in 1950 were more than 2½ billion dollars, were made through their retail stores. Another dream come true.

"Colonel McCurdy added gasoline farm engines to his products in 1913. As it grew and prospered, this new business gave additional employment to Evansville people. . . .

"In the early '20's a few venturesome men dreamed of automatic household refrigerators. Responding to the incentives of new markets and possible profits, the energy and resourcefulness of pioneers overcame hardships and discouragements to develop another great industry. Colonel McCurdy and his associates were among these pioneers, and Servel electric compression-type refrigerators entered the competitive lists with Frigidaire and Kelvinator.

"The '20's were days of tough going for refrigerator pioneers. From 1920 to 1930 the people of the United States bought only 2,900,000 automatic household refrigerators. Last year they bought more than six million. There were days in the early '20's when more refrigerators were returned to Evansville than were shipped. In those days the railways were special beneficiaries of the industry. Refrigerators were round-trip customers . . . .

"Automatic household refrigeration sparked the interest and inventiveness of resourceful men in Europe, as well as in the United States. Two young Swedish students of engineering dreamed of a superior refrigerator—a motorless refrigerator—one without moving parts in its freezing system. Von Platen and Munters patented their system of absorption refrigeration. A. B. Elektrolux, progressive Swedish manufacturer of vacuum cleaners and other household appliances, acquired world rights for manufacture and sale under the patents. Elektrolux, in turn, offered licenses to American manufacturers. Servel became American licensee under the von Platen-Munters patents . . . .

"A unique gas all-year air conditioning system had been in course of development and field test since 1934. Detailed plans for production and distribution were developed. An ultra-modern all-gas kitchen, based upon scientific research and motion study, was encouraged. The efficient and durable copper ball tank gas water heater was acquired, and plans were made for its production. . . .

"So that Servel might fully develop the possibilities of its strong postwar position, a new captain was invited to take charge of the good ship in September, 1949. Among the many executives I know in the household appliance field, there is one whose remarkable progress I had watched for more than 16 years. After his college years, his apprenticeship was served as a Frigidaire salesman and distributor, then as a Servel executive in sales and advertising. After discussion and agreement with me in 1935, he accepted the challenge of developing a household appliance business for Fairbanks-Morse. Not withstanding many obstacles, he was completely successful. When Fairbanks-Morse decided a few years later that they would concentrate on heavy industry and withdraw from the household appliance field, he sold the refrigerator development to Philco. He also sold Philco a much more valuable asset—his own services. Philco refrigeration quickly achieved sales volume closely comparable with that of the long-established leaders in the electric refrigeration field.

"W. Paul Jones accepts challenges and grasps opportunities. He knows through personal experience all aspects of household appliance design, production, and sales. He is a splendidly qualified journeyman with an enviable record of accomplishment. Under his leadership, many progressive changes have been made in Servel products and policies. He is accomplishing things for the future of Evansville."

'No Ad Is Too Small'

Bill Brownell, a former Campbell-Ewald advertising writer now in the Army, sent the following funny-but-true essay to *Industrial Marketing* magazine. We quote (without labored quotation marks).

Friend, you are looking at a big time writer. Maybe the biggest writer that ever hit trade advertising. You are looking at the guy who gave America's drug retailers such famous slogans as "Gillette . . . Good to the Last Strop" and "Ex-Lax . . . Eventually Why Not Now." In other words, you are looking at one ace copywriter. Me.

Now then, some agencies, they have the idea nothing matters but *Life* and *Post*. "Put George on that *Life* spread," they say. George he's the top copy talent. Or, "Call a meeting of the best creative men for the *Post* campaign," they say. Spare no expense.

Ah, but what happens to the other end of the list? What happens to, say *Headstone News* . . . the sexton's bible? Or maybe *Pluck* . . . the *Poultry Picker's Periodical?* That they give to some office boy!

The way they figure, the card rate of the book decides the price of the copywriter. These are the Big Deal agencies, where anything less than 1,000,000 readers is a vacant lot. If a page don't bill 50 grand, give it to the stock boy.

Do I mean our agency? You're not just whistling Rinso White I don't. You see, friend, our policy is, every job is a main job. That's what built this agency. Here's the idea. You're a Plymouth dealer. The government has frozen car prices and to keep you happy the factory is loading production with a new extra . . . a chrome plated push bar. Without good, hard-hitting, trade copy, how are you going to realize the new theme is, "The Car Designed With You Behind?" Believe me.

All right, look at it like this. The guys who read those trade ads, the publishers who put out those magazines, the clients who pick up the tab . . . they're human. They've got sensibilities. They're entitled to good copy.

That's where number one comes in. At our shop they put a specialist, an expert, on the job. Me. Only yesterday the boss hands me a trade ad and says, "The client wants I should give this job to the best man in the agency but I'll give it to you, anyway." What a card. Deep inside he knows the real bread and butter of this business is the trade copy. Like he says, what is caviar without bread and butter?

I'm the guy who thought up that trade slogan for the Afagas Plumbing Co., "High Quality at Low Prices." After it comes out I notice half a dozen other companies copying it.

Personally . . . I worked up a whole series for Afagas Faucets which the boss liked so much he didn't change one word. In fact, he thought so highly of the copy he approved it without even looking at it! Talk about having management's confidence.

I hear the boss present them to the client, "Real, down to earth, merchandising with plenty of sell," he says and then turns them face up, one at a time, slow and majestic like they was government bonds. The real class treatment.

You must remember the ads. "Afagas Faucets Cut Costs . . . More Profit, Less Loss with Afagas Faucets . . . Afagas, the Greatest Name in Faucets . . . Afagas, A Name You Can't Rust." You could see we didn't hold back on the creative talent and every time he turned one up he flushed with pride. What a showman.

Maybe you saw my page in last week's *Porcelain Parade* . . . Journal of the Men's Room Attendant. I mean the Afagas Commode ad with the Big Headline, "We All Have To Go Sometime." Nothing . . . just nothing but the best. Our media director estimates that, thanks to this smash copy, the ad reached a grand total of more than 300 influential, decision-making, water closet executives.

Yeah, I know, you hear bragging like that at every agency, but we're really on the level. That's why I can't understand the reputation we got. Why, last night, when my wife and I were dining out, I bump into a guy in Nedick's that actually tells me the reason we lost the Afagas account is on account of we neglected the trade ads. Just because his agency steals the account he makes like a big know-it-all. Just as if everything I told you before never happened. Imagine.

Listen, around here the smallest ad in the smallest magazine gets just as much attention as . . . pardon me, the phone. Yeah? . . . He wants it out right away? Okay, okay, I'll get right on it. Say, excuse me, will you, friend. That was the boss's secretary.

. . . I got to deliver the mail.

ASHVE Opens Environment Laboratory To Study, Develop Design Data for Panel Heating, Cooling Installations

CLEVELAND—The American Society of Heating and Ventilating Engineers unveiled its new Environment Laboratory here Nov. 1. The laboratory will be used to study human comfort in heated and cooled indoor spaces and to develop data for the design and installation of panel heating and cooling systems.

It is a large room in which the temperature of all the room surfaces and portions of each surface can be controlled separately so that it is possible to simulate a variety of combinations of cold and warm walls, windows, floors, and ceilings. For example, to simulate a corner room of a building, two walls can be cooled to the desired temperatures, while some of these walls can be held at a lower temperature to simulate glass areas.

The Environment Laboratory has been constructed at the general research laboratory of the ASHVE at 7218 Euclid Ave.

The Environment Laboratory had its origin in the widely held belief in the heating, ventilating, and air conditioning field, that there is a lack of authentic and universal design data for panel heating and cooling installations. Early in 1947 the ASHVE called a general conference at its Research Laboratory here which was attended by more than 100 representatives of engineering consulting firms, technical societies, government agencies, universities, and trade associations.

After an evaluation of available knowledge on the design of panel heating and cooling installations, ASHVE was asked to assume leadership in coordinating a program of research to develop the needed data. This led to the appointment by the society's Committee on Research of a Technical Advisory Committee on Panel Heating and Cooling to formulate an over-all research program.

The program developed by the TAC divided the general research problem into four spheres of activity:

1. Heat distribution within and behind the panel.
2. Heat transfer between the panel and the space in the room.
3. Comfort conditions.
4. Controls.

The program covering the first of these points consisted of laboratory and field studies on concrete slabs and plaster panels. Many of the results have already been published as research reports and used in the preparation of the chapter on radiant panel heating in the current ASHVE Heating, Ventilating, and Air Conditioning Guide.

Early in the TAC discussions it became apparent that in order to study points two and three of the proposed program, it would be necessary to construct a full-sized room wherein the temperature of all the room surfaces (and portions of each surface) could be controlled independently. This would allow studies under conditions with widely differing temperatures.

So that the room could also be used for a study of the relationship between human comfort and radiation, it was designed to permit division into two rooms when desired. At present the room is not yet an environment laboratory in the fullest sense. Additional equipment will have to be provided and some fundamental changes made after the completion of panel heating studies in order to make it suitable for physiological studies.

The room is approximately 25 ft. by 12 ft., with a ceiling that is adjustable to heights from 7 to 12 ft. When divided in two, each room will measure 12 ft. by 12 ft. The outer shell is of ¾-in. plywood on a light steel framework. The floor is three feet above the floor of the main ASHVE laboratory (in which it is housed) to provide a crawl space for piping and wiring.

All interior surfaces of the room are formed of aluminum panels. Attached to the back of these panels are ⅜-in. copper coils on 3-in. centers, connected to mains located in the crawl space.

The room has been designed to permit surface temperatures which may be encountered at outdoor temperatures as low as 0° F. Cold wall areas can be maintained at temperatures as low as 40° F.; simulated glass areas as low as 20° F. Floor and ceiling surfaces can be kept at any desired temperature up to 180° F.

Air can be supplied at simulated outdoor temperature for studying the effect of infiltration. Two changes per hour of air down to 0° F. can be supplied to the room at simulated window locations. This air is treated in an adsorption type dehumidifier and cooled to simulate dry outdoor air. The same system also furnishes dehumidified air to the crawl space and to the space between the wall panels and the outer shell to minimize condensation behind the panels.

The refrigeration compressor, heat exchangers, tanks, pumps, and miscellaneous equipment necessary to supply liquid to the various panels are located in the lower ASHVE laboratory immediately below the room. Separate pumps and piping systems are provided for the ceiling, floor, simulated cold wall areas, and simulated glass areas.

The instrumentation provided will permit readings of:

1. Surface temperatures within the room by means of almost 400 thermocouples attached to the back of the panels.
2. Air temperatures at any point in the room.
3. The rate and temperature at which the infiltration air is supplied.
4. How much heat is picked up or given off by all surfaces. This is measured by means of 175 heat flow meters, 11½ in. sq., which were fabricated at the ASHVE laboratory of bimetallic foil separated by plastic spacers.

Other instrumentation will be added to determine mean radiant temperatures; air velocities within the space; and the flow of heat from the air to any surface or vice versa.

Equipment will be added later which will permit maintaining air temperatures within the room independent of surface temperatures. This will permit the human comfort studies under varying internal dry bulb temperatures, relative humidities, and air change rates.

In addition, the laboratory has partially completed rooms for a proposed study of odors. These odor-free rooms will be put under test shortly.

Penn Electric Switch Extends Educational Control Shows

GOSHEN, Ind. — In response to demand, Penn Electric Switch Co. has scheduled additional educational control show meetings in the midwest area. These extra meetings will be held in South Bend, Fort Wayne, and Cincinnati.

Heating meetings are scheduled in South Bend on Nov. 26, Fort Wayne on Nov. 28, and Cincinnati on Dec. 6. Refrigeration meetings are scheduled in South Bend on Nov. 27, Fort Wayne on Nov. 29, and Cincinnati on Dec. 7.

A series of meetings in 12 southwest cities was recently completed.

According to R. H. Luscombe, Penn general sales manager, the popularity of the control meetings is due primarily to the fact that they are not sales meetings but "down-to-earth" sessions on control operation, selection, installation, and adjustment.

G-E To Market Single Model Garbage Disposer

BRIDGEPORT, Conn. — General Electric Co. will henceforth market a single garbage disposer model and will make it available either with or without a flow switch, it has been announced by C. J. Enderle, general manager of the electric sink and cabinet department.

Until now, the company has sold two disposer models—one with slightly larger waste storage capacity than the other. Both were equipped with flow switches.

Explaining the company's action, Enderle pointed out that when G-E introduced the garbage disposer in 1935, municipal authorities were concerned because the appliance could be operated without water, with hot water, or with an insufficient flow of water. To answer this problem, General Electric developed a switch which prevented the disposer from operating except when the proper amount of cold water was flowing through it.

Because of continuous improvements in design and performance and the experience gained from many thousands of installations, however, the company has now decided to sell its disposer either with or without the switch. "This will make the use of the flow switch entirely dependent upon local conditions and requirements," Enderle said.

The disposer with the flow switch —designated the FA-4—will carry a recommended national retail price of $124.95, Enderle announced. The disposer without the switch—the FA-14 —will be priced at $109.95.

They'll Do It Every Time . . . . By Jimmy Hatlo

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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—*Charles A. Dana.*

Trade-Ins Shouldn't Be The Problem They Seem To Be

Everywhere the editors of AIR CONDITIONING & REFRIGERATION NEWS go nowadays—and they travel almost everywhere—salesmen, dealers, distributors, jobbers, field men, and manufacturers confront them with a pregnant question:

"What are we gonna do about trade-ins?"

The automobile industry has learned to live with trade-ins, as nearly everyone who accosts the NEWS on this problem points out to us conscientiously. So, why can't we?

New-car prices are kept high enough to hold an umbrella over old-auto prices. Why shouldn't the refrigeration business be equally smart?

There are several reasons and explanations.

(1) In contrast to the automobile business, *too many surplus dealers* muddy the home appliance, air conditioning, and refrigeration fields.

(2) Automobiles are manhandled, womanhandled, mishandled, damaged, and wrecked frequently; whereas stationary refrigerators run on for years and years, and never are smashed by other refrigerators.

(3) New styles make auto owners impatient to buy current models, so as to impress the neighbors; whereas family economizing usually begins in the kitchen, and major styling changes on refrigerators are infrequent.

Inasmuch as the refrigeration industry doesn't try to create an equivalent impatience amongst the users of its products, the Problem of Trade-Ins has assumed proportions which are frightening to some. Many of the well-informed men we've talked with recently on this problem throw up their hands. Some seem to hope it will just "go away, quietly."

One obvious solution is to persuade owners of old refrigerators to keep them when they buy new models . . . put the old ones downstairs in the basement . . . on the back porch . . . or in a summer cottage . . . for additional storage facilities which every family seems to need.

Too many home refrigerators are cluttered up with bottles of beer and tomato catsup, small dishes of leftovers, spice containers, canned goods, bottles of olives, glasses of jelly, etc., etc.—so an extra refrigerator should come in handy-like for any family.

This suggestion has been capitalized upon by the nation's canniest refrigeration salesmen.

Quite a few dealers, however, don't see much point in adopting this method of avoiding trade-ins.

"People who keep their old refrigerators," they argue, "give them to their daughters when the latter get married. That way they cut us out of a percentage of the future market."

Possibly, but the daughters thus gifted are enabled to buy, from these same dealers, freezers or automatic washers or electric ranges which otherwise they might not have been able to afford. And sooner or later they'll have to buy a new refrigerator anyway. By that time the old one may be a complete junker.

Power Supply Symposium

Questions and Problems Which Plague Packaged Conditioner Manufacturers

A Statement by W. L. McGrath, Carrier Corp.

Air conditioning has become an important and integral part of American life. With it comes questions and problems attendant to any large industry. At a meeting of the Transmission and Distribution Committee, Edison Electric Institute, a symposium was held to bring into the open and help solve some of the problems faced by manufacturers of packaged air conditioners. We present here and on page 10 part of that discussion by William Henderson, Air Conditioning and Refrigerating Machinery Association; W. L. McGrath, Carrier Corp.; and R. A. Gonzalez, Airtemp Div., Chrysler Corp.

The following is a list of questions and problems which are raised from the viewpoint of the manufacturer of packaged air conditioning equipment. Through this discussion we would like if possible to come away with answers to these problems or plans for obtaining these solutions. These problems will be divided into five categories as follows:

A. Problems arising from service voltage standards and particularly recent revisions to same.

B. Problems arising from local variations in power service characteristics.

C. Problems arising because of inadequate motor protection.

D. Desired power characteristics for various sizes and types of equipment.

E. Long term design objectives.

We offer specific questions which will be stated here and amplified by the following speaker or in subsequent discussion. These are:

Service Voltage Standards

A. Problems arising from service voltage standards and particularly recent revisions to same.

1. The Publication "Preferred Voltage Ratings for EEI-R6—NEMA No. 117" calls for system voltages in the 200 voltage range of 208 or 240 volts nominal and indicates that maximums can run to 220 volts and 250 volts respective. NEMA Standard MG 2.1-2.2 recommend design voltage of 208 or 220 volts plus or minus 10%. Also in the original reference the recommendation to be used as a basis of design indicates a maximum of 244 volts.

2. If the equipment is designed for 244 volts maximum, what happens when it is used on 250 volts or what is worse, 264 volts which many utilities provide as a regular practice?

3. Who is responsible if equipment failures occur because of over voltage?

4. Even assuming that the design objectives on electrical equipment are changed (which they have not been so far), what happens to the man with existing equipment designed for 220-volt or 230-volt when he actually receives 264 volts. Must he pay for failures of such equipment himself?

5. It appears that an unannounced trend has taken place over several years which has increased service voltages successively from 220 to 230 to 240 and now apparently even higher. We would like to know if this is the end or whether this upward trend is going to continue year by year?

6. The manufacturer has been faced with the problem as between 208 and 220 volts as he must either stock two complete lines of equipment or make compromises which would allow a dual voltage rating. This recent move to a 240-volt standard practically forces a complete duplication of equipment and in many cases if the higher levels noted are going to persist, may force three duplicate lines of equipment in the 200-volt range. In view of the national interest in standardization why are these moves being made to complicate industry and move away from standardization and conservation of material?

7. In general why is it necessary to have both 208 and 240 volts? Why can't the utility industry agree on a single voltage in the 200-volt range and design transformers to make this standardization possible?

8. On most packaged air conditioning equipment a 5-year warranty is offered with the equipment. The motors are rated at 220 volts. Suppose they fail because of 250 or 260 volts? Is the warranty voided? If so, should the dealers notify the customer that the warranty does not apply?

9. If we must live with this increase of voltage, why does NEMA still recommend 220 volts for electrical equipment design and why do electrical equipment manufacturers still persist in furnishing 220-volt equipment?

Local Variations

B. Problems arising from local variations in power service characteristics.

1. ACRMA survey just completed indicates reported voltages up to 264 volts on 230 to 240-volt lines and voltages as low as 192 volts on the same circuit. This is a total range of 38%, yet electrical equipment is still designed for plus or minus 10%. Even assuming the design standards were changed to conform with the new system voltage recommendations, we would still be in trouble. What can be done about requiring conformance to a reasonable tolerance?

2. One of the most serious problems arises where single-phase loads are connected to one phase of a 3-phase service. We have found unbalance of as much as 40 volts between different phases. I am told that an unbalance of only 10% between phases will cause an increase in amperage of 44% in one line. If, as frequently happens, this is wired through the unprotected leg of a starter, equipment failures can occur. What is a reasonable tolerance on phase unbalance and what is done to comply? What should be our design objective?

3. In many instances incomplete protection is obtained where a fuse will blow in one line of a 3-phase circuit. Where this occurs on a primary side of certain types of transformers, a weird assortment of voltages appear on the secondary side. Does approved starting equipment protect the motor in such cases?

4. A blown fuse on one line on the secondary side of the transformer leaves the motor connected to a single-phase source. Will the starting equipment commercially available operate normally and not result in equipment failure under such conditions?

5. Another problem in service voltage maintenance is in the lap of the installer. Motors are frequently wired with inadequate wiring on the branch circuits. Will the starting equipment protect the unit under a condition of excessive voltage drop on starting?

6. Who should be responsible for policing the wiring of equipment of this type, particularly with reference to the wiring of the circuits within the customer's premises?

Inadequate Motor Protection

C. Problems arising because of inadequate motor protection.

1. What is the proper function of an across the line starter? i.e., is this device in combination with the fuse block supposed to protect the motor against any eventuality or variations in power supply?

2. If not, what is the range of its protection, and under what conditions does it not protect the motor?

3. Does a starter designed primarily for open motors give proper protection to a hermetic type refrigeration motor with a ratio of locked rotor to full load current on the order of 350 to 400%?

4. Why are only two of the three lines of a 3-phase circuit protected by thermal overload relays? Does this give adequate protection?

5. What is the function of the fuse used in combination with the motor starter? What standards should govern the selection of fuses?

Desired Power Characteristics

D. Desired power characteristics for various sizes and types of equipment.

1. Recent survey indications show a very heavy demand on the part of utilities for single-phase equipment in sizes up to 7½ hp. Since large size single-phase equipment becomes complicated, and something of a service liability as compared to the relatively simple 3-phase equipment, why is this preference shown?

2. What is the feeling about the use of automatic controls on air conditioning equipment? What about room air conditioners of ½ and ¾-hp. size on 115-volt circuits? (Note that there is a persistent demand on the customer's part for automatically controlled units which persists in spite of discouragement on the part of the industry).

3. To what extent are single-phase 230-volt units subject to these same problems?

4. How about 3-phase equipment?

5. What is the preferred voltage and design characteristics for residential cooling equipment? (Capacity 2 to 7½ hp.).

Long Term Design Objectives

E. Long term design objectives.

1. What are the requirements for packaged air conditioning equipment from the standpoint of utilities looking 5 to 10 years hence?

2. Is there a real incentive to installing numerous small horsepower apparatus as against a single large horsepower piece of equipment?

3. What should be the objective relative to starting conditions?

4. Should we look to electricity as the energy source for air conditioning? (i.e., or will gas or fuel fired apparatus be indicated?)

Power Supply Symposium

Packaged Conditioner Manufacturer Cites Need for Voltage Stability

A Statement by R. A. Gonzalez, Airtemp Div., Chrysler Corp.

We feel that this is a particularly happy occasion, because we so rarely get to discuss our problems in a joint session with both representatives of the motor manufacturers and representatives of the power generating industry.

We and our customers are surely dependent on both of your industries. The motor industry supplies the motors that drive our equipment; the power industry supplies the power that drives the motors. You folks in the power industry are aware of the fact that we do not make the motors—but sometimes you may suspect us of overloading the motors. At least, once in a while we get that impression.

When our equipment was largely belt driven, there was a separation of identity in the owner's mind between the compressor manufacturer and the motor manufacturer. However, in our modern sealed machines, that separation of identity has disappeared for all practical purposes. So while our industry formerly used to stand on the side lines and cheer you fellows on while you worked on your problems and ironed out your differences . . . we now find ourselves up here on the platform. We surely hope you have some novice allowances, some beginner's handicap for B.t.u. chasers who find themselves involved much too deeply in electricity.

Lulled Into False Idea

The 1925 to 1940 period of relative stability of alternating current voltages doubtless lulled us into the false idea that such a condition of voltage stability might be counted on as a permanent fact. The gradual disappearance of the direct current areas was a source of cheer to us.

Then came the war years. Probably no industry has better cause to remember the stresses and strains of those years than the power generating industry. Certainly no industry has better cause to take pride in its response to the challenge of those years.

In 1946 and '47, there were complaints of "low voltage" trouble. Then the complaints were expanded to wider-than-normal voltage variations. In the interest of briefness, let's face up to the current status. We are told about some new voltages that we did not know were in the book. I refer specifically to the increase from 220 volts in 3-phase power to 240 volts as the nominal voltage of distribution for line voltage. Some of us are inclined to think that this change has been made without the benefits of clergy . . . or at least without the benefits of NEMA and some of the rest of the interested parties.

Effect on Future and Old Equipment

We are trying to recover from this 240-volt shock. We are trying to find out where we stand in relation to the hundreds of thousands of pieces of equipment that are already in use. We are trying to evaluate the effect that this change will have on our future designs as well as on our future policies with reference to matters such as warranties. This is where we most need the beginner's handicap which I have mentioned.

We know that it is unnecessary to mention to either the power generating industry or the motor manufacturing industry the reasons why we are concerned over our public relations and customer goodwill in regard to the equipment of our manufacture that is currently in use. The continued successful operation of that equipment is just as important to all of us as it is to the users.

So we ask, "What are the hazards to that equipment in terms of motor burn-outs and starter failures?" When we put on the dark glasses we even wonder about possible fires that might be attributed to the higher voltages.

We are constantly aware that much of our store cooler type of equipment stays in service over a 15 to 25-year period. Most equipment powered by the larger horsepower motors has similar life expectancy and probably presents the same or at least similar problems from the power company standpoint.

Growth of Air Cooling As a Power Factor

In between these questions, it may be well to sandwich a few observations of interest. Just how big a factor is the new air conditioning load that comes on in a year's time The answer to that will naturally vary with each city. Here is some information on Dayton, Ohio. In 1948, the estimate of the new air conditioning added amounted to 400 tons. On the basis of usual consumption, this new air conditioning is estimated to have consumed 400,000 kwh. for the year. The reported increase in power sales for that year was 27,000,000 kwh. The new air conditioning accounted for 1.5% of the increase.

This set of figures certainly should illustrate the need for analyzing each area problem separately in preference to accepting a general statement that the new air conditioning is the main source of the increased power demand.

Another frequently mentioned consideration of this same problem is that much of the new air conditioning load is concentrated in the main business section of the town where the power distribution system was not designed for such large increases.

In the case of Dayton, a large portion of the new load was in the main business section. So it may be of interest to analyze the added load of air conditioning in terms of watts per square foot of building area.

When we air condition a typical office area, the full load consumption of the air conditioning equipment is in the nature of 3 watts per square foot of floor area being cooled. If a lighting increase of 3 watts per square foot is not a startling figure then the added air conditioning should not present too much of a problem either.

Cooling Has Aided Growth Of Lighting Use

The trend in lighting has been steadily upward. A fine educational and promotional job on that score was accomplished and is still being carried on by many power companies. We in the air conditioning industry feel that we have had a small part in making better lighting possible. These higher lighting loads require air conditioning to remove the increased heat and preserve livable conditions in stores, shops, banks, and offices that have availed themselves of the benefits of improved and increased lighting.

When you were advocating increased lighting, we felt that we were marching forward with you. Now we sometimes get the feeling that someone is marching too far and too fast. Is it you in the power business or us in the air conditioning business or the now apparently insatiable customers who want more and more power for all sorts of purposes.

Generally speaking, we never admit that there could be such a thing as an insatiable customer. The demand may be temporarily ahead of the supply for short periods of time, but we always have plans to catch up with the demand. It is those plans to catch up on the power demand that we are so vitally interested in.

We are vitally interested in the following three major points and issues:

1. Voltage variations in excess of 10% have occurred in a great many cases and over long periods. Our question on this point is: Do you propose to take corrective measures soon or do you propose to make some larger figure the allowable tolerance for voltage variations?

2. The problems of phase unbalance are, like these other matters, better known to you than to any one industry. You deal with it, presumably figure it out in advance, and then check and test for it as part of your operating procedures. All we can do on this item is to also ask you to clarify your position regarding the allowable variations and your plans for correction.

3. Distribution voltage increases are quite suddenly announced as accomplished facts although motor and allied equipment for the increased voltages are not in production. On this item we wish to point out that whereas voltage increases are announced in some areas, we still have to deal with all of the 200, 208, and 220-volt characteristics that are being supplied in other areas.

In addition to the loss of painfully-earned standardization, there remains the problems of both existing and new equipment. The power generating industry has a great reputation for service and dependability. As you know, that reputation depends in the future on how just such problems as we are discussing here are handled particularly from the customer expense angle on burned out motors and starters.

SLANTS on Service

"Slants on Service" is a new "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business. These helpful hints and suggestions for improved service methods and shortcuts have been assembled in capsule form.

Triplex 'Sierra' Wall Outlet Offers Several Advantages

Triplex wall electrical outlets that will take two large round plug caps in addition to a smaller one offer interesting possibilities in providing wiring for appliances.

Two outlets can be fed with a live circuit while the third in the receptacle can be switched, if desired. This permits, for example, a clock and a radio to be plugged into the two live outlets while the switched outlet can take a lamp for remote control.

In the kitchen two separate 20-amp. fused circuits can be fed to the triplex, two outlets being on one circuit, the third on the second. Thus, a coffeemaker, toaster, and roaster could be safely plugged in at the same time.

The receptacle is manufactured by McDonald Mfg. Co. of Los Angeles and distributed under the "Sierra" name.

* * *

Install Liquid Solenoid Close to Expansion Valve

Solenoid valves are usually installed in the liquid line on the supply side of the expansion valve in commercial refrigeration and air conditioning systems to prevent too much refrigerant from getting into the coil after the compressor stops. Without such a valve refrigerant may flow into coil and possibly into suction line, where, after condensing, it can flow into compressor and damage valves, etc.

Solenoids may be wired too close when compressor stops, or made responsive to thermostat. When thermostat closes the solenoid, the compressor will continue to pump the refrigerant out of the evaporator until stopped by the back pressure switch.

To hold pump-down time to a minimum, the solenoid should be installed as close as possible to the expansion valve. If the solenoid valve is at some distance from the expansion valve, a greater volume of refrigerant vapor will have to pass through the expansion valve when the liquid line solenoid opens. This can cause a hissing noise at the expansion valve; will reduce the valve capacity, and starve the coil until the liquid refrigerant reaches the expansion valve.

* * *

Where To Put Sight Glass

When installing a sight glass in a system, be sure that it is far enough downstream from any valve or restriction so that it doesn't show the turbulence resulting from the valve or restriction. Unless this distance is great enough, the turbulence would give a false indication of gas shortage or other restriction.

Best Brains of Both Industries Must Work Together To Solve Problems

A Statement by William B. Henderson, Executive Vice President, Air Conditioning and Refrigerating Machinery Association

The growth of America's demand for air conditioning is dramatized in the increase in the production and sale of packaged air conditioners. "Packaged air conditioner" is a term descriptive of two types of units which differ, in the main, only in size and general application. The room air conditioner is a unit of the window-sill or console type. The self-contained air conditioner is larger and is frequently referred to in the trade as a "store cooler."

In 1939, only 13,000 packaged air conditioners were sold, of which 9,000 were room air conditioners. In 1950, 250,000 packaged air conditioners were sold, of which 194,000 were room air conditioners. Despite materials shortages, 1951's sales of packaged air conditioners will show an increase over those of 1950.

From 1939 through 1950 (a 12-year period), 730,000 packaged air conditioners were sold. That, in itself, is not a startling total for this relatively-new industry. But an examination of sales by years reveals that over 83% of those sales were made in the period 1946 through 1950.

Public Demand Cited

The nation's rearmament program might somewhat curtail the production of packaged air conditioners temporarily because of the lack of needed materials, but that would only momentarily retard the increase in packaged air conditioner sales. The public demand and the sales potential are large. Leading appliance merchandising organizations are active in promoting the sale of packaged air conditioners. The ranks of the national merchandisers have recently been increased by the addition of RCA-Victor, which has just announced its entry into the packaged air conditioner field. Others may follow.

A very large potential for the sale of packaged air conditioners is in residences—a virtually-untapped sales field. Many homeowners, particularly those in the warmer areas of the United States, are convinced that the air conditioning of bedrooms, at least, is a necessity from both a comfort and a health standpoint.

Increasing sales of combined heating and cooling equipment for year-round air conditioning of the entire home are being made, both in existing residences and in new construction. At least five major companies are at present actively engaged in the manufacture and sale of year-round air conditioning installations.

My personal opinion, perhaps not entirely unbiased, is that the packaged air conditioner industry is in about the same stage of development as the mechanical household refrigerator industry was in the mid-1920's. In 1926, only 200,000 mechanical refrigerators were sold. 1950's sales of mechanical refrigerators amounted to 6,200,000 units—a result of 25 years of agressive and ingenious merchandising which really did not gather fully-effective momentum for ten years or so. Forty-four million mechanical household refrigerators have been sold since 1925. Today, the mechanical refrigerator is an almost-indispensable part of the vast majority of America's 42 million homes wired for electricity.

Over 600,000 Packaged Units Sold Since 1946

Contrast that with the packaged air conditioner industry, where a major selling effort on a limited scale has been in effect for only five years—since 1946. In that time, slightly over 600,000 packaged air conditioning units have been sold, and the momentum has gathered pace with each succeeding year.

While the annual unit volume of sales of packaged air conditioners will probably never equal that of household refrigerators, the conservatively-anticipated volume of sales, under normal economic conditions, should be several times that of the present. That is particularly true of room air conditioners. Even if only 25% of the owners of electrically-wired homes in the United States qualified as prospective buyers of one or more packaged air conditioners, the potential is still very substantial. Add to that the potential of the commercial market—restaurants, stores, hotel and apartment rooms, offices, etc.—and one cannot do other than agree that the future of the packaged air conditioner industry is an optimistic one.

The packaged air conditioner industry is prepared to meet the large potential demand for its products. It has ample production, distribution, and service facilities which can be further expanded as needed. It has competent research and technical personnel to further refine and improve its products. But there is one persistent and difficult problem, the solution of which is only partly within the province of the air conditioning industry—the availabilty of adequate electric power of proper characteristics to operate the air conditioning units.

My associates from the air conditioning industry will discuss with you the technical problems our industry is encountering in obtaining the power supplies needed by your customers and ours to operate their air conditioning units. Those problems will require the best brains of our two industries working in harmonious understanding of each other's viewpoint, if satisfactory solutions are to be achieved. I hope that as a result of this meeting some inter-industry mechanism will be set up to solve our difficulties.

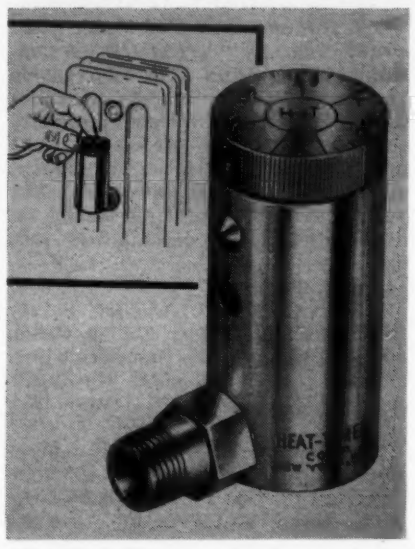
Experience has shown that the demand of the American consumer for any product cannot long be denied, and it would not be constructive procedure for us to attempt to dispose of our joint problems temporarily by "sweeping them under the carpet" and hoping that time alone will bring a cure. Such a course of action would only aggravate an already-difficult situation and compound the confusion.

What's New

When requesting further information on new products, please use "Information Center" form.

Radiator Valves Control Temperatures Automatically

—KEY NO. A-1120—

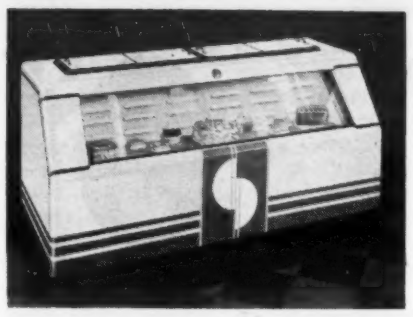


NEW YORK CITY—Room temperatures are individually and automatically controlled through the use of a new, improved thermostatic radiator valve manufactured by Heat-Timer Corp. here. Simple dial setting results in any wanted room temperature.

Heat-Timers, through automatic control of radiator air venting, speed heat to colder rooms . . . save heat waste on rooms already warm, and allow desired temperature variations from room to room, the manufacturer says.

Heat-Timer valves are applicable to any low pressure one-pipe steam system without interference or alteration with existing boiler controls.

The valves now retail at $3.95 instead of $4.95 each. The temperature-sensitive phosphor bronze bellows and other features remain the same as in the former model. Body of valve is brass, finish is chrome.



Grand Rapids Announces New Low-Temp Case

—KEY NO. A-1122—

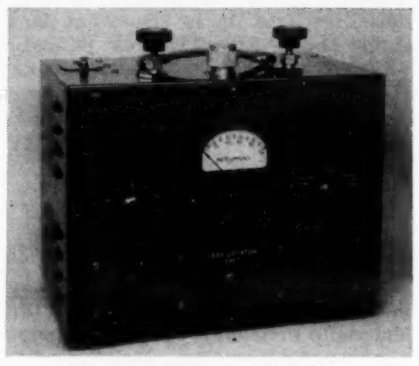
GRAND RAPIDS, Mich. — Grand Rapids Cabinet Co. has announced its "ZerOviz" low temperature display and storage case, a merchandiser for fancy molds ice cream, center mold rolls, and ice cream pies and cakes.

The case is said to afford full vision and to maintain storage temperatures low enough for carry-home service.

Use of the ZerOviz is not limited to the display of special forms only. By removal of the tray-back and bottom, packaged ice cream as well as frozen foods can be displayed and stored.

The case is made in 4-ft., 6-ft., and 8-ft. lengths and is available in a wide selection of colored porcelain.

RCA Develops High-Sensitivity, Portable Leak Detector



—KEY NO. A-1121—

CAMDEN, N. J.—A new and improved, portable, high-sensitivity leak locator, designed as a factory and laboratory device for detecting and locating tiny leaks during the manufacture of electron tubes or any device which can be evacuated, was announced recently by the scientific instrument section, RCA Victor Div. of Radio Corp. of America.

A hydrogen-sensitive, ionization-type instrument, the new RCA Leak Locator, Type EMV-7, weighs 31 lbs. and is simple enough to be operated by non-technical personnel.

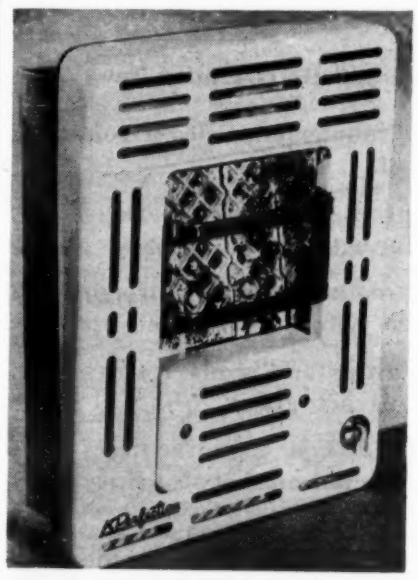
Its new and very much improved vacuum system can be pumped down, ready to operate, within two minutes. More rigid construction and improved mechanical design afford better over-all performance.

The instrument is capable of detecting leaks as small as 1 x 10^{-5} liter-microns of hydrogen per second.

Heart of the new leak locater is a sealed-off, high-vacuum-gauge tube, RCA type 1945, which responds only to hydrogen.

The instrument itself is complete with a high-stability DC amplifier, microammeter, self-contained power supply, and all-metal exhaust system and cold trap. It is contained in a dark cobalt gray hammeroid cabinet.

The instrument measures 13¾ in. high, 15 in. wide, and 11 in. deep, over-all. It operates from a 105-125-volt, 60-cycle, a.c. line.



Perfection Stove Gas Wall Heater Has No Vents

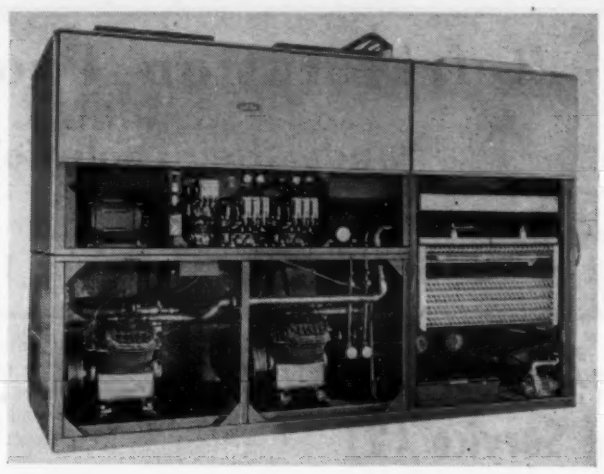
—KEY NO. A-1123—

CLEVELAND—New to the Perfection Stove Co. gas heater line is the unvented model RW-10 gas wall heater with an output of 10,000 B.t.u.

The RW-10 has three radiants, produces instant radiant and circulating heat. A constant flow of cool air through the lower louvers insulates the sides and back so that the wall never gets hot.

A self-locking gas valve is insurance against gas being turned on accidentally.

This heater, with white porcelain enameled heavy gauge steel casing, is extremely easy to install in the walls of new or existing structures, where it is an out-of-the-way yet ready source of heat. It is particularly designed for use in small areas.



UsAirco Package Series Has Central Station Elements

—KEY NO. A-1124—

MINNEAPOLIS — "Refrigerated Kooler-aire," the air conditioning unit which contains all the elements of a central station air conditioning plant, including evaporative condenser, in a single package, will be offered in a series of new models featuring two complete refrigeration circuits, it was announced recently by United States Air Conditioning Corp. here.

The new dual-circuit units, which have been designated DRK, "have been designed for economical operation at either full or half capacity, providing self-contained equipment suitable for installations which involve load variations and require true capacity control," the company said. "Separate refrigeration circuits are arranged to provide effective dehumidification when operating at reduced capacity.

"Additional operational savings will be provided in those installations which are subject to electrical demand charges.

"Internal wiring provides for alternating the lead compressor to insure even wear, and a time delay relay prevents both compressors from starting simultaneously. The units are wired for use with a two-stage thermostat for normal operation.

"The time delay relay permits installation of the units in many locations where power companies set a definite limitation on starting current, without the complication of reduced voltage starters."

The dual-circuit Refrigerated Kooler-aire will be offered in 15, 20, 25, 30, 40, and 50-ton capacities.

It includes all of the features of the standard RK unit including "easy conversion" to a heating plant through addition of a steam or hot water heating coil; built-in evaporative condenser "for conservation of up to 95% of the cooling water"; "minimum" space requirements; and "simple and economical" installation.

The unit requires only three connections: to ducts, to water supply and drain, and to power supply.

Thermometer Sticks to Flat Surface for Easy Checking

—KEY NO. A-1125—

LOS ANGELES — Pacific Transducer Co. here has announced a new surface temperature thermometer for checking external temperatures for wall leakage of refrigerators, cold chambers, and freezers.

The instrument is also designed for checking the temperatures of journals and other bearings, electric motors, and cylinder blocks; for the checking of residential and industrial wall, ceiling, and floor temperatures; and for checking the outside temperature of pipes, plastic dies, and rubber molds.

"The instrument may be quickly and easily affixed to any flat surface by applying a small amount of silicone grease, which is supplied with the instrument, and sticking the thermometer in place.

"This silicone grease does not melt and so holds the instrument throughout all ranges of temperature, providing an excellent thermal coupling between the surface to be measured and the instrument."

Also furnished with the thermometer is a small magnetic clamp which will hold it securely in place for application on steel dies or other ferrous surfaces.

The thermometer has been thermodynamically designed to produce an essentially unilateral thermal instrument which indicates the temperature from the back of the instrument only according to the company. A highly reflective evaporated mirror on the dial is said to insure the thermal element against external radiation. The range is 0° to 300° F. calibrated in 2° increments.

The model 310 surface temperature thermometer is 2 in. in diameter. The net price is $4.95.

Information Center

For *more information* on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

Key No. ..... Key No. .....
Key No. ..... Key No. .....
Key No. ..... Key No. .....
Key No. ..... Key No. .....

Products Advertised
(list name, page, and issue date)

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Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers

Paul Reed

'Freon-22' In Field Service (2)

'FREON-22' INCREASINGLY POPULAR

At first, "Freon-22" was made in very small quantities, and all of it was allocated for ultra-low temperature equipment for blood plasma desiccation, metal treatment, and similar war purposes. After the war, "Freon-22" became available in quantity, and its popularity for ordinary low temperature applications has increased rapidly.

"Freon-22" is used as the standard factory refrigerant in a number of home and farm freezers, low-temperature fixtures, sharp freezers, and similar medium-low temperature equipment.

On such equipment, in which the temperature to be maintained is, for example, -5°, the evaporator is apt to be about -25°. Using "Freon-12," the evaporator pressure would be about two inches of vacuum. Any leaks would cause air and moisture to be drawn in. The "Freon" refrigerants absorb extremely small amounts of moisture, so most of the moisture that gets into the system, exists as free water and eventually freezes up the expansion valve or capillary tube.

It is preferable to have an evaporator pressure a few pounds above zero gauge. Then there is much less likelihood of getting air and moisture into the system. Moreover, it is easier for the serviceman to detect leaks by using the halide torch, halide candle, or other leak testing equipment, if the normal suction pressure is above zero gauge.

If the normal evaporator pressure is on a vacuum or at about zero gauge, as is frequently true with "Freon-12," the cabinet must be warmed up somewhat in order to get a positive pressure of several pounds per square inch gauge in the low-pressure side of the system. Not only is this undesirable in frozen food cabinets, but it is a time-consuming and laborious process for the serviceman. So a positive suction pressure, a few pounds per square inch above zero gauge, is desirable from a field service viewpoint.

With "Freon-22," the normal pressure in a -25° evaporator, is about 7½ p.s.i.g., which is a desirable suction pressure to work with, and much safer from a moisture and air viewpoint than a couple of inches of vacuum with "Freon-12."

SMALLER 'FREON-22' UNITS SAVE SPACE

Nor is the growing popularity of "Freon-22" confined to low temperature equipment. It is being used a good deal in self-contained equipment in the higher temperature brackets, where space is a very important factor.

The fixture manufacturer demands that the condensing unit manufacturer make his unit to the smallest possible dimensions. Space costs money, and his competitors are alive to any opportunity to reduce the size of the equipment and thus save cost. Moreover, the user eventually gets the benefits of these lower costs. Competition sees to it that the lower costs are handed on to the user.

LITTLE DIFFERENCE IN EFFICIENCY

There is little difference in efficiency between "Freon-12" and "Freon-22"; in fact, there is not very much difference in efficiency or horsepower per ton between any of the "Freons," nor for that matter, between any of the refrigerants. The selection of a refrigerant to use for a certain application or with a certain type of equipment, is governed more by safety considerations, evaporator temperature, displacement required, the type of compressor, and corrosion characteristics, than because of any differences between refrigerants as to efficiency, horsepower per ton, and cost of operation.

SAFETY CHARACTERISTICS

The National Board of Fire Underwriters classify "Freon-22" as non-flammable, and put it in their Group 5A, which means that it is one of the safer refrigerants as to toxicity and flammability. "Freon-22," like the other "Freons," is safe to breathe in moderate quantities unless, like other "Freons" and halocarbon refrigerants, it is decomposed into toxic gases by heat, such as from an open flame.

The ASA B9.1 National Safety Code classifies "Freon-22" in Group 1 among the safer refrigerants which includes carbon dioxide, methylene chloride (Carrene #1), and the other "Freons."

As mentioned previously, equipment charged with "Freon-22" can be tested for leaks by the use of the halide torch, halide candle, and the electronic halide leak detector, or by submersion or soap-water methods.

"Freon-22" is considered a stable refrigerant, meaning that it does not break down at the temperatures encountered in the refrigerating system nor readily form corrosive compounds or sludges when exposed to moisture or air in the system. In these respects, it is somewhat less stable than "Freon-12" but is quite satisfactory if the refrigerating equipment is clean and reasonably dry, if well refined oil of good quality is used, and if excessive discharge pressures are avoided.

(To Be Continued)

Mulkey Heads RAD Knoxville Div.

KNOXVILLE, Tenn.—J. C. Mulkey has been appointed manager of the Knoxville division of Radio & Appliance Distributors, Inc., wholesale distributor of International Harvester refrigerators and freezers.

The distributor's main offices are in Chattanooga. In addition to I-H refrigeration, the firm distributes RCA and Thor products in eastern Tennessee.

Current Literature Available

For further information please use "Information Center" form on "What's New" page.

M-H Describes Vane Type Electric Contact Control

——KEY NO. M-1120——

PHILADELPHIA—A 16-page catalog illustrating and describing vane type electric contact control units was published recently by the Brown Instruments Div. of the Minneapolis-Honeywell Regulator Co. here.

The control units are used with M-H Electr-O-Vane thermometers and pressure gauges, the Electronik potentiometer, and the new Pyr-O-Vane and Protect-O-Vane millivoltmeters.

They provide snap-action on-off, two-position or three-position control.

The book is keyed "Catalog 8000."

Rusticide Co. Tells How To Stop Rust, Corrosion

——KEY NO. M-1121——

CLEVELAND—Rusticide Products Co. here has recently issued a new four-page folder, "Worried about Rust" that tells how Ospho, a metal primer applied directly over rusted surfaces, stops rusts and primes metal for paint.

Advantages, prices, containers, and other information are all covered.

Whitlock Mfg. Bulletin Describes Equipment Line

——KEY NO. M-1122——

HARTFORD, Conn.—A four-page bulletin describing Whitlock refrigeration equipment has been published recently by the Whitlock Mfg. Co.

The bulletin, No. 140, covers condensers, chillers, pipe coils, coolers, and receivers. Pictures, descriptions, and specifications are provided for all products.

Huge Sign 24 Ft. by 18 Ft. Made from Color Film Tells Admiral Story 40 Ft. Above Bldg.

CLEVELAND — The world's first and largest outdoor color film spectacular, the new Admiral "Spectachrome" promoting the firm's refrigerator, was recently erected atop a two-story building on Carnegie Ave. at 106th Place here.

The huge color film, enlarged 40 times from the original negative, measures 24 ft. high and 18 ft. wide. The sign rises 40 ft. above roof level. It portrays an appetizing "midnight snack" spread out before a Admiral refrigerator with open door.

The midnight snack includes a plate 15 ft. in diameter, 7-ft. tomatoes, 12-ft. carrots, and 6-ft. slices of ham.

Above the picture is the name "Admiral" in gold neon letters 4 ft. high. Flashing successively at the bottom in gold and red neon are the words "Dual-Temp," "Keeps Foods Fresher," and "No Defrosting."

The "Spectachrome" is lighted from the rear by 144 fluorescent (4-tube) color corrected lights of 5,760 watts.

The sign was constructed for the Admiral Corp. by C. Rankin Bingham of Dramaturgy, Inc. here after nine months of experimentation. Weatherproofing the display was achieved by fabricating a thin sheet of acetate (.0020 in.) and installing it with 96 spring clips to allow it to adjust to high winds. The sheet of acetate offers as much wind resistance as the mainsail of a small schooner.

To make the film, a special air conditioned enlarging room 50 ft. long, 27 ft. wide, and 15 ft. high was built. It was equipped with a Precipitron to remove dust particles from the air electronically.

The film, originally a 5 by 7-in. ektacolor shot, was enlarged in 17 strips, each measuring 18 ft. wide and 18 in. high, and joined together by invisible strips.

Using a special enlarger, the strips were blown up by projection, the enlarger moving along its own tracks bolted to the floor. Other special equipment for processing the film and then fabricating the pieces was also developed.

The film was installed on an 18-ft. roller and hung from the top.

The sign was installed on Carnegie Ave. in a strategic location to attract the attention of thousands of suburbanites driving into Cleveland from Shaker Heights, Cleveland Heights, and other eastern residential areas.

Thor Net Income Drops After 1950 Boom Period; Report $223,692 In 9 Mos.

CHICAGO—Thor Corp. has reported net income of $223,692, or 66 cents a share, on net sales of $17,541,582 in the nine months ended Sept. 30.

Raymond J. Hurley, chairman, described sales and earnings as below-normal "as compared with the above-normal return of the corresponding period in 1950, when the public's purchases greatly exceeded actual requirements." Nine month totals last year were: net profit, $887,183, or $2.48 a share; net sales, $21,228,657.

In the quarter ended Sept. 30, Thor showed a deficit of $161,138, or 48 cents a share, on sales of $3,910,521. In the like 1950 quarter there was a net profit of $518,224, or $1.45 a share, on sales of $8,646,753.

Hurley cautioned that while the outlook for sale of Thor's consumer goods is brighter, the opposite is true for procurement of production materials necessary for their output. Steel for production of new washers is now limited to 53% of that used during the January-June, 1950, base period.

He also said that in the fourth quarter the company will begin volume production on approximately $10,000,000 worth of contracts for artillery shells and air frames for jet aircraft. The bulk of these orders are scheduled for completion by mid-1952, but additional renewal orders are expected, he said.

Ledin Named Service Engr. For G-E Laundry Equipment

BRIDGEPORT, Conn.—Charles C. Ledin has been appointed product service engineer on General Electric home laundry equipment, according to the company.

A graduate of Pratt Institute, Ledin joined the company in 1941 at Lynn, Mass. He subsequently served in various engineering capacities at Bloomfield, N. J., and Schenectady, N. Y. until 1948 when he became the appliance service representative in the Great Lakes District.

Since July of this year he has been in Bridgeport as assistant product service engineer on home laundry equipment. In his present position, he will succeed the late Thomas B. O'Gara.

CMP Direction 8 Provides Finished Conversion Steel

WASHINGTON, D. C.—Any consumer who has received an allotment of steel may order finished conversion steel to be used in fulfilling his related authorized production schedule, the National Production Authority ruled recently.

In its Direction 8 to CMP Regulation 1, the agency declared that the consumer would have to make his own arrangements to obtain semi-finished conversion steel with which to supply the finished conversion steel producer so that the latter could fill his order.

The finished conversion steel producer is permitted to fill that order provided that it does not interfere with any other NPA directives or production orders.

Direction 8 does not apply to any conversion agreements prior to Oct. 1, the date on which it took effect. The consumer is authorized to accept delivery of finished steel after that date without charging it to his fourth-quarter allotment if he certifies that the semi-finished conversion steel was purchased or acquired prior to Oct. 1.

York Corp. Announces Promotion of C. F. Gibbs

YORK, Pa.—C. Fred Gibbs, director of employe publications and community relations for York Corp., has been promoted to the position of assistant manager of the Industrial Relations Div., the company announced.

Gibbs joined York in 1936. In 1943, he was appointed editor of the firm's employe publication *Shop News*, which he developed. The publication has received several awards for excellence of industrial editing.

As a member of the Community Relations Committee of the Manufacturers' Association of York, Gibbs helped plan and put into practice the community relations program of the industries of York county.

Reco Products Div. Will Move Offices To New York

PHILADELPHIA—Reco Products Div. of Refrigeration Engineering Corp. will move its main office from Philadelphia to New York City at the end of this year, according to an announcement by Andrew J. Asch, Jr., president.

In making the announcement, Asch said that New York is the focal point of much of Reco's market and the headquarters of many of its suppliers.

All manufacturing operations of the company were moved to Emporia, Va. nearly two years ago.

Hiram McGrath Heads Johnston Water-System

MANSFIELD, Ohio — Hiram W. McGrath has been appointed president of Johnston Water-System Co. here, it has been announced.

Prior to joining Johnston, McGrath was general manager of Columbia Pump Co. He is a veteran of World War II, serving with the Army in England, France, and Belgium for three years.

Supermarket Plans--

(Concluded from Page 1, Column 5)

would take an increasing percentage of total retail volume.

Another chain—Food Fair Stores, Inc., recently opened two new units. One is in Fort Lee, N. J., and the other, an elaborate store in the Port Authority Bus Terminal in New York.

Some conferees called attention to the newly-opened Shoppers World in Framingham, just outside Boston. This consists of a variety of stores under one roof and is a sort of supermarket of supermarkets. To be extended to other sections, the Shoppers World plan indicates that operators of conventional markets ought to develop new merchandising techniques to hold on to their trade, these persons said.

Sidney R. Rabb, chairman of the board of Stop and Shop, Inc., food chain, noted that the trend in the last five years has been toward super deluxe, larger stores, large parking spaces, greater variety, more prepared foods, additional departments, and more services and conveniences for customers.

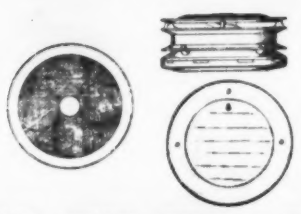
He said the latter included air conditioning, wider aisles, rest benches, page boys to handle bundles, bundle stations, and accommodation desks for payment of public utility bills and check cashing.

PATENTS

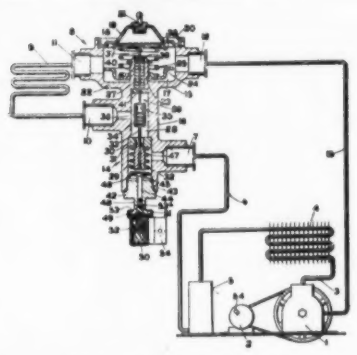
Week of Aug. 14 (Cont.)

DESIGNS

164,234. COMBINATION ELECTRIC FAN AND ROOM CONDITIONER. Hymen Greenberg and Jesse J. Shelley, Chicago.



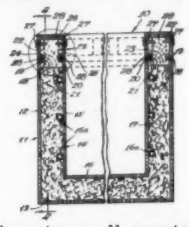
2,564,421. FLOW CONTROL VALVE FOR REFRIGERATION SYSTEMS. Franklyn Y. Carter, Dearborn, Mich., assignor to Detroit Lubricator Co.



A refrigeration expansion valve, comprising a valve body member having an elongated portion terminating at a chamber portion at one end of said member, a passageway extending longitudinally through said elongated portion and opening at one end into the chamber in said chamber portion, said passageway having an intermediate portion between spaced annular shoulders, an outlet passageway leading from said intermediate portion, a closure member seating against one of said shoulders and having a central aperture therethrough, a valve seat member seating against the other of said shoulders and having a valve port, a valve member positioned on the opposite side of said seat member from said intermediate portion and cooperable with said valve port, a thermostatic element having a movable wall member closing said chamber and concentrically overlying said passageway, a valve stem extending through said central aperture and said valve port and operatively connecting said movable wall to said valve member, said valve stem comprising two portions, a hollow cylindrical member on one of said portions and positioned in said intermediate passageway portion, a piston on the other of said portions and reciprocally movable in said cylindrical member, a spring position within said cylindrical member and opposing compressive movement of said piston, a thermostatic power element having a plug member closing the other end of said passageway, a plunger reciprocal in said plug member and spaced from said valve member and operable to engage the same upon predetermined movement by said power element, said power element being operable upon further movement of said plunger after engagement with said valve member to move said valve member to closed position; and said spring; piston, and cylindrical member being operable as a lost motion means to permit relative movement by said valve member and said first-named thermostatic element so that said valve member may be held closed independently of the operation of said first-named thermostatic element.

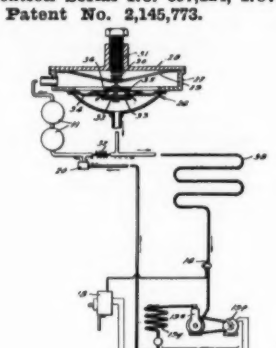
Week of August 21

2,564,943. INSULATION SEAL FOR REFRIGERATED CABINETS. Isaac M. Wherry, Evansville, Ind., assignor to International Harvester Co., a corporation of New Jersey. Application June 23, 1948, Serial No. 34,803. 4 Claims. (Cl. 62—89.)



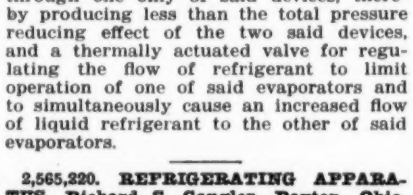
4. A refrigerator wall construction having inner and outer walls forming an insulating chamber, a heat insulating material and a cooling element within said chamber, a rigid low-heat conducting member fixedly positioned between said walls and spaced from the marginal edges thereof, said member having channel-like passages some of which are disposed horizontally and spaced from the marginal edges of said member and others vertically in opposite faces thereof with the vertical passages extending from said horizontal passages to the upper marginal edges of said member, means comprising sealing compound in said passages for sealing the insulating chamber, and covering means including a low-heat conducting resilient gasket-like member positioned over the upper marginal edges of said inner and outer walls and a channel-like exterior member superposed thereover and fixedly secured to said walls.

2,565,145. TWO-TEMPERATURE REFRIGERATION CONTROL. Glenn Muffly, Springfield, Ohio. Application Jan. 23, 1939, Serial No. 252,291, now Patent No. 2,407,794, dated Sept. 17, 1946, which is a division of application Serial No. 697,124, Nov. 8, 1933, now Patent No. 2,145,773.



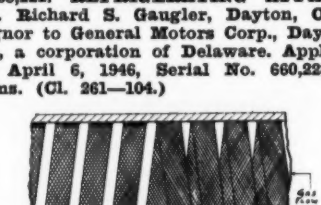
1. In a refrigerating system, two evaporators, liquid flow means including a pressure reducing device of the vapor-lock type and another pressure reducing device, connecting means for series flow of refrigerant liquid through both said devices to one of said evaporators, connecting means for flow of refrigerant liquid to the other of said evaporators through one only of said devices, thereby producing less than the total pressure reducing effect of the two said devices, and a thermally actuated valve for regulating the flow of refrigerant to limit operation of one of said evaporators and to simultaneously cause an increased flow of liquid refrigerant to the other of said evaporators.

2,565,220. REFRIGERATING APPARATUS. Richard S. Gaugler, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Feb. 8, 1946, Serial No. 646,342. 9 Claims. (Cl. 261—104.)



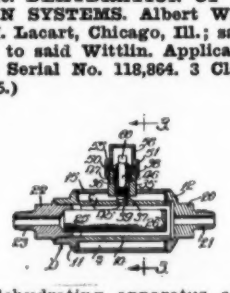
1. Gas and liquid contact apparatus including an elongated hollow generally horizontal container forming a passage for the flow of gas therein, a plurality of conduits extending longitudinally within the container, said conduits being formed of a plurality of thicknesses of woven wire sleeving in close contact with each other, means for blocking the major portion of the space between the conduits and the adjacent walls of the container and for holding said conduits in firm contact with the walls of the container, and means for feeding a liquid to the conduits.

2,565,221. REFRIGERATING APPARATUS. Richard S. Gaugler, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application April 6, 1946, Serial No. 660,228. 3 Claims. (Cl. 261—104.)



3. Heat transfer apparatus including a container only partially filled with liquid, and capillary means in the form of parallel spaced portions of flattened wire sleeving extending from said liquid in flat contact with the interior surface of the container, said capillary means having capillary flow throughout in all directions for exposing liquid above the normal liquid level in heat exchange relation with the walls of the container, the portions of flattened wire sleeving covering the major portion of the interior surface of the container through which the flattened sleeving extends to provide an exposed liquid holding surface of large area above the surface of the liquid.

2,565,416. DEHYDRATION OF REFRIGERATION SYSTEMS. Albert Wittlin and Rollin H. Lacart, Chicago, Ill.; said Lacart assignor to said Wittlin. Application Sept. 30, 1949, Serial No. 118,864. 3 Claims. (Cl. 62—117.85.)



3. A dehydrating apparatus comprising a tubular body provided at its ends with means for incorporating it into a refrigeration system and providing a passage through it for a refrigerant and forming a mixing chamber interiorly thereof, a casing arranged exteriorly of the tubular body and having a chamber for a supply of dehydrant, there being a port through the wall of the tubular body confronting the stream of refrigerant passing through the body and communicating with the casing chamber, means through which a supply of dehydrant may be introduced into the casing chamber, and a valve movable toward and from the port to close and open the same whereby to permit dehydrant within the casing chamber, when the valve is open, to pass through the port and into the tubular body in response to aspiration produced by the refrigerant passing through the body, said valve, when closed, operating to shut off communication between the supply chamber and the tubular body whereby dehydrant may be introduced into the supply chamber while the refrigeration system is in normal operation without escape of refrigerant.

AVAILABLE FOR LICENSING OR SALE

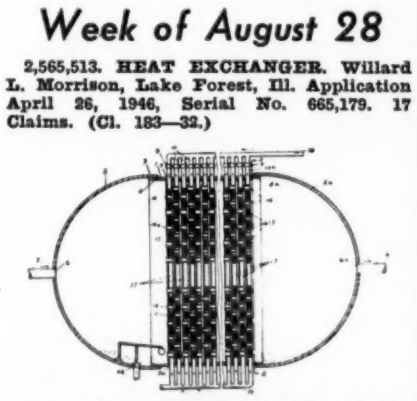
The following patents are offered for license or sale by George W. Crise, Danville, Ohio.

Pat. 2,430,759. Air-Conditioning System for Motor Vehicles. Patented Nov. 11, 1947. Air conditioner is operable by control knob on instrument panel. A conduit structure stationarily mounted on and beneath the hood has spaced upper and lower air passages. One passage is for air warmed by the radiator and advanced therethrough by the engine fan. The other passage receives substantially unheated air from front of radiator. The passageways converge into a restricted portion where the two columns of air intermingle. A duct in the hood communicates with the restricted portion and with interior of vehicle body. Thermostatically controlled air flow regulating valves are so mounted in the air passages as to move toward open position in response to air flow through the passages. Groups 35—84; 38—31. Reg. No. 44,065.

Pat. 2,519,025. Hermetically Sealed Thermostatic Switch. Patented Aug. 15, 1950. A hermetically sealed thermostat for refrigerators. A deflectable arm connected to an insulated support has a contact near the outer end supporting a snap-action magnet. A fixed magnet is attached to outer end of arm. A bimetallic arm mounted on the support and spaced below the deflectable arm has a contact and snap-action magnet at outer end. A manually rotatable magnet within a dial externally of device is in registry with the fixed magnet. Inner ends of both arms may be inserted into an electrical plug which may be connected with the compressor motor of a refrigerator. Groups 33—66; 35—84. Reg. No. 44,075.

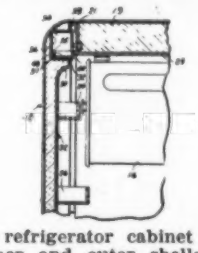
Week of August 28

2,565,513. HEAT EXCHANGER. Willard L. Morrison, Lake Forest, Ill. Application April 26, 1946, Serial No. 665,179. 17 Claims. (Cl. 183—32.)



1. In a heat exchange member, a housing, an inlet duct and an outlet duct, baffle means in the housing between said inlet and outlet ducts, said baffle means including a partition having nozzles therein, and means for cooling said partition and the fluid passing through said nozzles, including a coil adapted for the evaporation of a volatile refrigerant.

2,565,995. REFRIGERATOR CABINET CONSTRUCTION. Robert Louis Spencer, Cincinnati, Ohio, assignor to Avco Mfg. Corp., Cincinnati, Ohio, a corporation of Delaware. Application Jan. 4, 1949, Serial No. 69,169. 3 Claims. (Cl. 312—214.)



1. In a refrigerator cabinet formed of spaced inner and outer shells having a breaker strip extending therebetween and having a door extending to the upper extremity of said outer shell, an auxiliary food storage compartment in said door, said compartment extending partially above and partially below the inner shell of said cabinet, and a second door for providing access to said food storage compartment.

(To Be Continued)

Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request **to the purchasing office under which the purchase is listed** in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. **Ordnance District Offices do not have information on any other purchases.**

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
Commanding Officer, Picatinny Arsenal, Dover, New Jersey			
Apparatus, humidity testing	2 ea	101 B	14 Nov 51
Temperature, altitude and relative humidity testing apparatus	1 ea	101 B	14 Nov 51
Commandant Of The Marine Corps, Washington, D. C. Attn: Supply Dept., Procurement Section			
Spare parts for refrigerator unit, mechanical, gasoline engine driven, 600 cubic foot sectional walk in Model MQ 51-U. S. Thermo Control or equal	170 itm	405 B	28 Nov 51
Philadelphia District Corps Of Engineers, 121 N. Broad St., Philadelphia, Pennsylvania			
Air conditioning unit, skid mounted, self-contained type, water cooled with cooling tower - 5 HP motor, 220 volt, 60 cycle, 3 phase, 70000 BTU per hour	30	(Addendum No. 1 ENG-36-109-52-82 B)	19 Nov 51
Wright-Patterson Air Field Base, Headquarters, Air Materiel Command, Dayton, Ohio			
Detector, leak, Halide	4 ea	52-5114-Q	19 Nov 51
Detector, carbon monoxide	1217 ea	52-5114-Q	19 Nov 51
Yards And Docks Supply Office, Port Hueneme, California, Attn: Procurement Division			
Ice-makers solid flake electric self contained 1000 pds per day/min/w/combination shipping container and ice storage bin	111 ea "B"	289-51	30 Nov 51

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Reference No.	App. Bid Date
Regional Information Officer, Region 3, General Services Administration, Washington 25, D. C.			
Valves, Globe, flanged, steel, 400 lb., A.S.A. rating, carbon steel valves, 400 lbs., at 750 degrees F, outside screw and yoke, Chapman Valve Mfg. Co. model list 403, catalog No. 20, 1951. Figure CG or equal			
Size 5-inch	1 ea	3K-3999-R	11-15-51
Size 6-inch	1 ea	3K-3999-R	11-15-51
/DO-MRO, CMP Reg. 5/			

U. S. DEPARTMENT OF COMMERCE

Description	Quantity	Reference No.	App. Bid Date
Chief, Procurement Section, National Bureau Of Standards, Conn Ave. and Van Ness St., N.W., Washington 25, D. C.			
Tubing, brass	5 lbs	B-2-969-52	11-14-51
Copper tubing	50 lbs	B-2-972-52	11-14-51
Copper tubing	100 lbs	B-2-972-52	11-14-51
Tubing, monel	8 lbs	B-2-972-52	11-14-51

U. S. ATOMIC ENERGY COMMISSION

Description	Quantity	Reference No.	App. Bid Date
Atomic Energy Commission, Idaho Falls, Idaho			
Thermostat	4 itm	1653	11-12-51
Condensate pump spare parts	25 itm	1652	11-9-51

CONTRACTS AWARDED AS OF NOV. 1, 1951

Description—Contractor and Address

Ships Parts Control Center, Naval Supply Depot, Mechanicsburg, Pennsylvania
Repair parts for heat transfer equipment.—4,050, $43,431.—Robert H. Water, 423 Valley St., South Orange, N. J.
Repair parts for refrigeration equipment.—1,280, $69,314.—Penn Electric Switch Co., Goshen, Indiana.
Valves and repair parts.—3,220, $39,257.—Crane Co., 836 South Michigan Ave., Chicago, Illinois.
Repair parts for heat transfer equipment.—8,739, $78,403.—Foster Wheeler Corp., 165 Broadway, New York, N. Y.
Valves and valve parts for refrigeration equipment.—3812, $42,491. —Alco Valve Co., 865 Kingsland Ave., St. Louis, Missouri.
Valves and repair parts.—13,950, $105,377.—Foster Engineer-Co., 835 Lehigh Ave., Union, N. J.
Valves and valve parts for refrigeration equipment.—1,040, $33,349.—Alco Valve Co., 865 Kingsland Ave., St. Louis, Mo.

Yards And Docks Supply Officer, U. S. Naval Construction Battalion Center, Port Hueneme, California
Electric refrigerator.—ea., $48,074.—Frigidaire Sales Corp., 3251 Leonis Blvd., Los Angeles 58, Calif.
Valves.—ea., $56,968.—Mueller Co., 2801 E. 12th St., Los Angeles, California.
Refrigeration unit.—ea., $125,065.—Amana Refrigeration Inc., Amana, Iowa.
Increase item 1 refrigerators.—50, $61,697.—C. V. Hill & Co., Inc., Trenton, N. J.

Chicago Quartermaster Depot, QM Purchasing Division, 1819 West Pershing Road, Chicago 9, Illinois
Condensing units.—140 ea., $39,114.—Copeland Refrigeration Corp., Sidney, Ohio.

DELIVERY service is the key to operation of Champine Refrigeration Supplies, Detroit parts wholesale firm which recently opened its third store. Here Arch MacNicol and William Champine prepare to hoist a Lehigh unit to Ed Champine on the truck.

Detroit Refrigeration Wholesaler Opens Third Store; Builds Business with Service

DETROIT—Opening of its third store here was celebrated by Champine Refrigeration Supplies with an open house staged on a recent Saturday. Numerous factory representatives were on hand.

The new store is located in the heart of the city at 451 E. Milwaukee and becomes the headquarters for the firm. Previously the firm's headquarters had been at the east side store. The latter will be operated as a branch, as will the west side store which was opened some time ago.

Despite the addition of the new store, the firm will continue with its delivery service, according to the owners: William and Ed. Champine and Arch MacNicol. In fact, the firm features the slogan "Pioneers in Delivery" because it was with that special service in mind that the firm was originally started after the war.

In fact, William Champine recalls his initial venture into the field by explaining: "I put $50 worth of belts in my car, called myself a wholesaler, and started making the rounds to call on servicemen and contractors."

Gradually the firm acquired a fleet of trucks kept loaded with a variety of parts and supplies which make daily rounds for customers and prospects. In addition, special deliveries are made in emergencies. There's no extra charge for either service.

All three principals in the firm have a wide acquaintanceship among contractors, particularly the smaller operators, because each of the partners was previously in the contracting business.

Prewitt Succeeds Barton as Wagner Atlanta Branch Mgr.

ST. LOUIS — Wagner Electric Corp. announced the retirement of L. C. Barton, manager of the company's Electrical Div. branch office in Atlanta, Ga., and the appointment of W. H. Prewitt, Jr. to succeed him.

Barton joined Wagner in 1934 as a transformer specialist, and became manager of the Atlanta branch in 1938. Prewitt started as a student engineer in 1935, and went to Wagner's Cincinnati branch as a salesman the following year. He was transferred to the Atlanta branch early in 1951.

Ford Joins Sales Staff Of Bell & Gossett Co.

CHICAGO—Edward F. Ford, who has been active in the heating equipment industry for the past 16 years, has joined the sales division of Bell & Gossett Co., it was announced recently by R. A. Patterson, general sales manager.

Before joining B & G, Ford was associated with the C. A. Dunham Co. of Chicago, maker of heating equipment, where for the last three and a half years he was in charge of marketing and promotion and responsible for Dunham's government and defense contracts division.

Prior to that he was sales manager of the company's central and Pacific division.

Earlier, he was with the Kehm Corp., a Chicago heating manufacturer, for three years.

Norman Klein Named To Head Export Division For Super-Cold Corp.

LOS ANGELES—F. R. Waingrow, executive vice president of the Super-Cold Corp. here, has announced the appointment of Norman W. F. Klein as head of the company's export division.

Norman Klein

Super-Cold has been in the export market for over 20 years with a complete line of more than 40 items of refrigeration equipment.

Klein has an established reputation in the export field, the company said. He is a native of Holland and was educated in European technical schools and universities.

After a period of several years with the Shell Oil Co. in an executive capacity at the Hague, Klein operated his own manufacturing and import and export business.

Later, he was connected with the European service of Morehouse Industries, and subsequently moved to Los Angeles to handle the worldwide export operations for that company.

At Super-Cold, Klein will be responsible for the extension and strengthening of foreign importer-distributor-dealer contacts and will supervise all export advertising and merchandising efforts of the company.

Hajoca Distributes Uskon Radiant Heating Panels

PHILADELPHIA — Hajoca Corp., manufacturer and wholesaler of plumbing and heating equipment, has been named a distributor of Uskon electrical radiant heating panels manufactured by the United States Rubber Co., it was announced jointly by the two companies.

Hajoca, with 33 distributing branches located in nine states along the eastern seaboard, becomes the first supplier to plumbing and heating contractors to handle the unique system of electrical radiant heat.

Uskon heating panels contain a heating unit made with rubber that will conduct electricity and operate on a principle similar to the rays of the sun. They are installed in the ceiling where heat rays radiate down through the atmosphere in a room warming everything they touch. The air in each room is vitally fresh but not cold and there are no drafts or cold spots.

Servicing Hermetics In the Field

In answer to requests of readers who have been following this series, the articles which appeared in the NEWS in the weekly issues from April 16 through Aug. 6 have been reprinted in convenient booklet form. These may be obtained from the NEWS at $1 per copy.

Replacing Motor Compressors In the Field (2)

By Arne Perttola, Owner and Manager
Brighton Hermetic Service, Detroit

As was indicated in the preceding instalment, it is generally better not to attempt replacing the hermetic motor-compressor assembly of a household refrigerator in the field. When the unit is defective, either the whole refrigerating system should be replaced, or the entire cabinet taken to the shop where the system can be repaired and replaced.

On commercial installations using a hermetic unit, however, it is rather difficult and usually impractical to send the entire cabinet and unit into the shop or factory to be rebuilt when only the motor-compressor assembly is defective.

When a commercial hermetic compressor does appear defective, though, the serviceman will get considerably better results if the complete condensing unit assembly, including the relay, is sent in for rebuilding or replacement. In many cases, the hermetic compressor has become defective due to reasons other than any troubles originating in the compressor itself.

Defective relays, fans, and wires can cause compressor troubles just as a plugged line or filter in the high side may.

When the complete condensing unit assembly is removed from the installation, the entire unit can be cleaned and checked thoroughly in the shop and then dehydrated. If all this is done prior to re-installation, the unit can be put back into operation in very short order and without further troubles.

When removing a defective unit from the system, close all the service valves and trap as much refrigerant as possible in the evaporator. This is to prevent any moisture entering the system while the unit is being rebuilt or exchanged.

Before re-installing the hermetic condensing unit, disconnect the capillary tube or expansion valve at the evaporator. The evaporator should then be blown out with refrigerant. After the evaporator has been cleared, attach all the lines and wires and operate the unit with the high-side service port open to the atmosphere. (Almost all commercial hermetic units are equipped with service ports of some type.)

A portable vacuum pump should now be attached to the high-side service port. Due to the construction of the hermetic unit, it is impossible to draw a good vacuum with the unit itself. Many servicemen, however, draw as good a vacuum as possible with the hermetic unit and then blow some refrigerant through to get out the balance of the air. This practice does not remove all the air from the system and is therefore not recommended.

Before charging the system, the compressor should be allowed to reach normal operating temperature so that refrigerant will not go into the dome while charging.

In our experience, we have found the best method of charging is to charge the unit from the low side with refrigerant in the form of vapor to the point where the suction line is getting rather cold but is not frosted, the evaporator is completely frosted, and the capillary filter is very nearly the same temperature as the upper part of the condenser.

The above applies to a capillary system only. A system using an expansion valve should also be charged from the low side, but the quantity of refrigerant will be governed by the size of the receiver.

J. T. Maloney Leaves Acme For NPA Post as Analyst

JACKSON, Mich. — Acme Industries, Inc. has announced that the services of its sales promotion manager, Joseph T. Maloney, have been loaned to the National Production Authority.

Maloney will reside in Washington, D. C. and will serve the NPA as a commodity industry analyst for a period of six months to one year. Maloney will return to Acme upon completion of his work with the government.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" $5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications $7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS AVAILABLE

SALES ENGINEER: For central Texas Carrier major dealer. Ideal climate for our line. Must be experienced. Excellent possibilities and compensation for right man. Send complete dated history of your experience and recent photograph to AIR CONDITIONING, INC., P. O. Box 4067, Austin, Texas. Attention, W. J. Brinkmann.

SALESMAN TO cover Florida, Georgia, North and South Carolina with complete line of commercial refrigeration, freezers, reach-ins, walk-ins, bottle coolers, ice cube makers and direct draw beer dispensers. Give full particulars and lines carried now. Write E-905 First National Bank Building, St. Paul 1, Minnesota.

COMMERCIAL REFRIGERATOR salesman to handle Warren refrigerator dealer and chain accounts in Ill., Mich., Ind., Wisc. Must have experience our industry. THE WARREN CO., INC., P. O. Box 1436, Atlanta 1, Ga.

SALES ENGINEER with experience in heating and air conditioning wanted by national manufacturer for New York City territory. Splendid financial opportunity for right man. Send complete background first letter for early interview in New York City. Write BOX 3855, Air Conditioning & Refrigeration News.

WATER COOLER manufacturer will open branch sales office in Boston and cover N.E. wholesale distributors. Applications from qualified persons kept confidential. Give experience and starting salary expected first letter. BOX 3856, Air Conditioning & Refrigeration News.

WANTED REFRIGERATION engineer. Leading manufacturer of refrigeration units and compressors, located in middle west, has opening for a graduate engineer with several years' actual experience in the testing laboratory. Must be experienced in complete testing of both belt driven and hermetic type condensing units and compressors. Must have a thorough background and experience with electrical problems of hermetic units. This position is permanent and an excellent opportunity for right man. No one need apply unless they can fill all of these qualifications. Give complete history, references and expected salary in first reply. All replies will be held strictly confidential. BOX [illegible] & Refrigeration

[illegible]er—With old es[illegible] in heat transmechanical or [illegible]st have at least 2 years' experience in design and application of heat transfer equipment. Good working conditions, paid vacation, hospitalization, etc. Location New York State. Give full particulars in first reply. State salary expected. BOX 3859, Air Conditioning & Refrigeration News.

AIR CONDITIONING equipment salesmen for wholesale distribution of self-contained units, towers, pumps, etc. Experienced only. Salary, bonus, car allowance. Metropolitan New York area only. BOX 3861, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

BARGAIN: PATTERSON 160 ton dry expansion water cooler, 500 GPM, three "Freon" circuits, 4 tube passes per circuit. 30" diameter, 182" long, A.S.M.E. stamped, used less than three months and guaranteed to be in perfect condition, new cost $5600.00, will sell outright or trade for good merchandise. GORDON LOZIER REFRIGERATION CORPORATION, 1612 California, Omaha, Nebraska.

FOR SALE—Standard makes-new hermetic units-static & fan-cooled cond. ⅛-⅙, ⅕, ¼, ½. Open units ⅓, ½. Relays and overload protectors. Driers, T.X.V. valves, pressure controls, belts, fittings. Water-cooling coils for carbonated water. Send for your lists and prices on our many other parts and supplies at great savings. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln, Chicago, Ill.

FOR SALE: ¾ H.P. prominent brand low temperature air cooled refrigeration unit. Complete including compressor, condenser, motor, fan, receiver, oil separator. Enclosed in sheet metal cover. Brand new, still in original crate. $160 or best offer. BOX 3860, Air Conditioning & Refrigeration News.

BUSINESS OPPORTUNITIES

FOR SALE: Well established commercial refrigeration business located in Central Florida and handling only national known brands. Easy terms can be arranged. BOX 3850, Air Conditioning & Refrigeration News.

FOR SALE: Commercial refrigeration business in northern New Jersey. Lines include store fixtures, air conditioning and allied equipment. Franchised by manufacturers of nationally advertised products. A going business established over 16 years. Priced for quick sale. BOX 3851, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured or exchanged. Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, $1.15 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5, Michigan.

ASRE Meeting--

(Concluded from Page 1, Column 4)

atomic irradiation of foods and its probable effect on the refrigeration industry. This will be presented by Dr. L. E. Brownell, who has been conducting some interesting experiments on the sterilization of foods by atomic rays.

An entire technical session will be devoted to food processing and allied subjects including recent developments in refrigerator cars, the specific and latent heats of foods in the freezing zones, and an account of how the Norwegians, noted fishermen for centuries, apply modern methods in their trade. Also, there will be a discussion on the hydrocooling of fruit and vegetables at one of the other sessions.

One paper that is expected to provoke considerable discussion will be a description of the construction, operation, and results of the calibrated room calorimeter as seen by one manufacturer. The use of this type of device for testing and rating room air conditioners has been specified in a recent standard adopted by ASRE, but some segments of the industry are not entirely sold on its use and may present arguments against its adoption.

The reputation of Old New Orleans for southern hospitality and places of great historical interest assure the success of the social program. Beginning Sunday evening, Dec. 2, and continuing through Wednesday, Dec. 5, the local host committee, Walter Cooke, chairman, has provided a full program of social events to cater to the most exacting taste.

The speaker at the Welcome Luncheon on Monday, Dec. 3, will be Wm. H. Fitzpatrick, Pulitzer Prize winner, editor, *New Orleans States*, who will present his views on the Universal Declaration of Human Rights as adopted by the United Nations, and which may be presented to the United States Senate for ratification.

Government Agencies Release Pamphlets To Aid Businessmen

WASHINGTON, D. C.—Three informational releases pertaining to the defense program were issued recently by government agencies.

A four-page pamphlet entitled "Converting to Military Production" has been issued by the National Production Authority. Designed to assist the small civilian producers threatened by materials shortages, the pamphlet lists the steps and the considerations involved in securing government contracts. It is available through Printing Services, Department of Commerce, Washington 25, D. C.

As an aid to businessmen seeking defense contracts, the Munitions Board's Office of Industrial Security has prepared a booklet on "How To Be Cleared for Handling Classified Information Within Industry." The booklet may be obtained, at 10 cents a copy, from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

The Munitions Board has also compiled prime awards in each state to show the geographic pattern of military contracts.

Air Force Leases Airport

WASHINGTON, D. C.—Congress has authorized the Army Engineers to spend $8,577,000 to expand and equip the Laredo Municipal Airport, Laredo, Tex., as an advanced single-engine jet training school.

The Air Force will lease the entire airport. Permanent air personnel will consist of about 2,300 military and 500 civilians.

Consumer Credit Rises For Second Straight Month, FRB Reports

WASHINGTON, D. C.—For the second straight month since Congress relaxed credit controls instalment credit increased. Consumers added $112 million to the instalment debt bringing to $13,156 million the amount outstanding on Sept. 30, the Federal Reserve Board reported.

The board said that expansion in instalment buying was just about evenly divided among three major categories—automobile sales credit, instalment loans, and household furniture and appliances.

The September increase followed a $115 million rise in August immediately following the easing of controls. FRB aides said they expected a continued upward trend in the consumer instalment debt for the rest of this year.

Despite the August and September increases, outstanding consumer credit at the end of September was $118 million below a year ago.

Emerson Electric Chicago Office In New Location

ST. LOUIS—Chicago district office of the Emerson Electric Mfg. Co. has recently moved to larger quarters. New location is 1623-25 South Pulaski Rd., Chicago 23, Ill. New Phone numbers are Lawndale 1-1100 and 1-1101.

All warehouse and office operations are consolidated in the new quarters and will facilitate delivery and shipment of fans and motors. T. J. Egan continues as Chicago district manager.

5-Year Protection Plan on Commercial Sealed Units Offered by Kelvinator

DETROIT — Kelvinator has announced a new five-year protection plan on its commercial sealed units, according to H. C. Patterson, commercial sales manager.

Patterson said the five-year coverage is available at a cost of $5.00 for nominal ⅓-hp. units and smaller, and $7.00 for nominal ½ hp. Units purchased without the additional coverage carry the normal one-year warranty.

The new warranty specifically covers the entire unit and the fan motor, but does not include the relay and capacitator. Patterson said the warranty may be obtained at the time of purchase, or later when the unit is installed.

He said it applies to all Kelvinator commercial sealed units purchased through Kelvinator distributors and zones. Replacement units may be obtained from any Kelvinator distributor or zone.

R. C. Niess To Work on Gov't Projects at York Home Office

YORK, Pa. — Richard C. Niess, until recently a sales engineer for York Corp.'s North Atlantic District in New York City, has been transferred to the home office here where he will assist with engineering problems dealing with special government defense and essential civilian projects, including low temperature refrigeration applications.

A graduate of the Virginia Military Institute in 1944, Niess has been with York ever since. From 1944 until 1947 he was enrolled in the student engineering course and assisted in compiling data for sales engineering manuals. In 1947 he was transferred to New York City.

'DO' Ratings To Be Restricted--

(Concluded from Page 1, Column 4)

all kinds of things. Besides the DO's there are the CMP ratings—those placed for steel, copper, and aluminum. Then there is the DX rating which has superiority over DO. These are applied by the NPA itself on most urgent orders. Between the DO and DX is a special group used by the Atomic Energy Commission and the armed forces.

The DO rating is the oldest and most versatile in the priority system, thus it is the least effective. What the NPA would like to do is to limit the extent with which the rating can be used. Most of the changes will center on the DO rating only and will not affect either DX or CMP priorities.

Officials hinted that one change will be a rule to the effect that the DO can't be used, except in connection with military or atomic energy programs, in ordering a list of consumer durable goods.

What the list will be has not yet been revealed. But it is said to affect a large number of manufacturers. It is aimed mainly at companies that get CMP allotments of steel, copper, aluminum and with them, the right to use the DO for other supplies.

Purpose of the liberal use of the priority was to allow the manufacturer who uses these critical materials to get all other supplies that he needs. There wouldn't be any point in giving the manufacturer of refrigerators, say, all the steel he needs for cases if he couldn't get rubber for door gaskets. So he was given free use of the DO rating to get these gaskets and just about anything else, including a water cooler for the office.

As the NPA men see it, the refrigerator manufacturer won't be allowed to use the DO rating on orders for consumer goods. The new rule will permit him to get only those things which he actually needs to make his product or to keep his factory running.

The restriction will apply to civilian industries. Firms making guns, tanks, airplanes, or other military equipment will be able to use the rating more liberally, officials say.

Another possibility for limitation is to take away from some producers practically all of their power to apply priority ratings.

For example, the company which fastens together its product with nails (a CMP product) can also use the DO rating for obtaining other materials. The manufacturer which uses screws for the same operation cannot use the DO stamp because screws are not CMP rated.

What the NPA may do is this: Limit the power to use the DO to cases where the supply of steel, copper, and aluminum would be a "limiting factor." According to NPA officials, the supply of nails wouldn't be a limiting factor because the manufacturer could use some other method (such as screws) to do the same work. Thus the company couldn't use the DO order to get other consumer durables.

First step in this direction is restricting use of the rating on chemical orders. It can't be used unless the chemicals are needed for equipment for the armed forces or the Atomic Energy Commission.

Millott Appointment--

(Concluded from Page 1, Column 2)

years of service with G-E distributors at Allentown and Harrisburg, Pa., and Detroit.

He then returned to G-E and in 1939 went to Bloomfield, N. J. to work on air conditioning and commercial refrigeration distribution.

From the end of 1939 until his new appointment, Millott was active in the frozen foods and air conditioning equipment fields. He headed both the Conditioned Air Equipment Co., Minneapolis distributor of air conditioning and commercial refrigeration

Sutton Room Cooler--

(Concluded from Page 1, Column 2)

given, except Sutton officials indicated that several new features have been incorporated in its design which will result in greater room comfort.

It was pointed out that the unit has been in the development stage since 1947. Several hundred pilot models of ¾-ton capacity have been in operation under various test conditions during the past year.

Sutton will continue to manufacture Vornado Air Circulators.

Detroit RSES To Hear Tyler Service Manager on Nov. 15

DETROIT — Art Perez, service manager of Tyler Fixture Co., will discuss "Refrigeration In General and Open Display Cases In Particular" before the Greater Detroit chapter of RSES Thursday evening, Nov. 15, Veterans Memorial Bldg.